

An Examination of the Success of US Venture Capital Funded Companies in the Russian Market

Research dissertation presented in partial fulfilment of the requirements
for the degree of

MSc in Accounting and Finance Management

Griffith College Dublin

Dissertation Supervisor: **Louise Gorman**

Student Name: Svetlana Perich

Date of submission 11.09.2020

Candidate Declaration

Candidate name: Svetlana Perich

I certify that the dissertation entitled: An Examination of the Success of US Venture Capital Funded Companies in the Russian Market, submitted for the degree of MSc in Accounting and Finance Management, is the result of my own work and that where reference is made to the work of the others, due acknowledgement is given.

Candidate signature: Svetlana Perich

Date: 11.09.2020

Supervisor name: Louise Gorman

Supervisor signature: Louise Gorman

Date: 11.09.2020

Acknowledgements

I would like to thank my supervisor, Louise Gorman, for her help and support during the writing process. She is an amazing professor and supervisor, I could have never done it without her.

Also, I would like to thank my parents for giving me such an opportunity to receive education abroad.

Abstract

The US venture capital market is perceived to be one of the most successful in the world. Every year the US improves innovation through new creative start-ups which have been emerging for decades. The Russian venture capital market, on the other hand, has experienced difficulties in development for many reasons. Both markets are different from each other, but at the same time they share certain similarities, such as the role of government in the markets. The Russian market lacks development and innovation, letting foreign business fill the gap in the market. The study will show whether the US companies were able to enter the Russian market and offer their products or services, substituting the Russian innovative companies.

The study will discuss the venture capital (VC) in general, which will include a consideration of the history of VC, types of investment rounds, business angels and crowdfunding. Then, the US and the Russian VC markets will be analysed in order to determine how they work. Further in the study, a case study will be conducted: eight companies, which began their activity as start-ups and became successful, will be identified. The companies' annual reports will be used to calculate certain financial ratios to assess their financial and general success in the market. Two years will be compared: the year before and after the funding round. This will lead to a survey of the Russian people to determine how they perceive the chosen companies. All that will help see whether the US companies were able to fill the gap in the Russian market.

Table of contents

Chapter One: Introduction	4
1.1. Background	4
1.1.1. The Barriers to Venture Capital Funding in Russia	5
1.1.2. The Success of Venture Capital Funding in the US	5
1.1.3. The Demand for Innovative Products and Services in the Russian Market	6
1.2. Aims and objectives of the research	8
1.3. Research context	9
1.4. Significance of the Study	10
Chapter Two: Literature Review	11
2.1. Introduction	11
2.2. Venture capital	11
2.2.1. Types of venture capital	12
2.2.2. Forms of financing	12
2.3. History of VC	14
2.4. Venture Capitalists as Investors	16
2.5. Business angels and venture capitalists	17
2.6. The relationship between venture capitalists and crowdfunding	19
2.7. Venture funds in Russia	20
2.7.1. Families of Funds	20
2.7.2. Side funds	21
2.7.3. Investment Team Compensation	21
2.7.4. Fund Performance Indicators	22
2.7.5. Reporting to LPs	25
2.7.6. Russian market trends	25
2.8. Venture Capital in the US	30
2.8.1. Unicorns as a term in the US market	31
2.8.2. Sectors	31
2.8.3. Fund structure	31
2.8.4. Fund regulation	32
2.8.5. Incentives	32
2.8.5. Market trends	33

2.9. The US vs the Russian VC Market	35
Chapter Three: Research Methodology	37
3.1. Introduction	37
3.2. Research Philosophy	37
3.3.1. Sample selection	38
3.3.2. The Case Study Approach	38
3.3.3. The Survey Method	39
3.4. Data collection	39
3.5. Conclusion	39
Chapter Four: Analysis	40
4.1. Introduction	40
4.2. Case Studies	40
4.2.1. WeWork	40
4.2.2. Uber	43
4.2.3. Peloton	46
4.2.4. Pinterest	48
4.2.5. Tesla Motors	50
4.2.6. SendGrid	53
4.2.7. Apellis Pharmaceuticals	55
4.2.8. Lyft	57
4.3. The Survey	59
4.4. Discussion	61
4.5. Conclusion	62
Chapter Five: Conclusion	63
5.1. Introduction	63
5.2. Conclusions	63
5.3. Recommendations	64
5.4. Limitations of the Study	65
5.5. Avenues for future research	65
5.6. Final thoughts	66
References	67
Appendix A: Survey	71

Chapter One: Introduction

1.1. Background

Our society is at the post-industrial stage of economic development. There has been a shift to the new economy where simple production and sale of goods has been replaced by production of services using information and knowledge as the primary resource of production. Venture capital is an integral source of finance for many contemporary firms (Vranovich and Michurina, 2013). Often underestimated as a source of business finance, venture capitalists and business angels have provided capital to a large amount of the most successful and well-known companies, such as Apple, Intel, Microsoft.

The venture capital market is one of the most important indicators of national innovative development. Venture capitalists invest in innovative firms and development projects (Vranovich and Michurina, 2013). The financial performance and market position of enterprises depends on their innovative activity. As consumer needs change amid a changing economic, social and environmental landscape, they demand innovative products and solutions (Lanin, 2009). Venture capital helps implement new ideas and innovations, thus, directly influencing developments not only in businesses but economies in countries.

The emergence and fast development of venture capital is possible if there are: innovative potential and personnel with well-judged perspectives on future directions in innovation; and capital resources, in particular, access to venture capital markets with high capacity and solvency. The sustained development of venture capital relies on continual innovation by businesses. Venture capital investments help start-up companies emerge and leads to improvement in economic indicators such as GDP, GNP and the balance of payments (Fedotov, 2019). Also, worldwide development of innovation lead not only to achievements in competitiveness improvements in the internal market but also to its growth on the international level. Venture capital increases employment of highly qualified professionals, thus, creating new workplaces. Furthermore, innovative capital investments contribute to the renewal and modernisation of traditional industries (Vranovich and Michurina, 2013). Also, the development of VC results in the development of the financial system as a whole.

1.1.1. The Barriers to Venture Capital Funding in Russia

The Russian venture capital market has always depended on the country's relationship with the western countries. Almost 90% of projects and investments themselves were distributed on technological, internet communications, social networks and software (Golubovich, 2015). Currently, Russian innovators' access to VC is restricted due to problems in the internal market. Overall, the shift led to a massive contraction in the market.

There are a number of key problems currently facing the Russian Federation which restrict venture capital financing (Aris, 2019). The first is the political situation and conflicts with Europe and the US. Russian investors are reluctant to invest into their home country, because of political instability and uncertainty. Secondly, investments became more risky because the exchange rates are volatile. Thirdly, the regulation of the market is strict; hence, foreign investors are hesitant of investing due to uncertainties in regards to the regulations. Lastly, the sanctions against the Russian Federation became an extremely negative factor for investments in general. The money which is available for the entrepreneurs may not be the best resource because they could be connected to the oligarchs which are under the sanctions. Collectively, this all makes receiving the required capital extremely difficult; it has become challenging for venture companies to persuade investors in high, stable and safe returns. It has become very inexpensive for foreign investors to buy, because the value of ruble is very low in comparison to other currencies therefore there are no "sellers", because they do not expect to receive the fair value on the investment. Ultimately, the Russian market must become more stable and transparent in order for venture capital to serve as a realistic source of finance for entrepreneurs.

1.1.2. The Success of Venture Capital Funding in the US

The VC market of the US has been developing for a long time. It started out in Silicon Valley through the 1960s and 1970s. At that time it was considered as a form of private equity investments. Later, the market became more structural and venture capital funds formed, managed by limited partnerships. Two biggest and the most successful funds till today emerged in 1972 (Bacior, 2020). The funds are: Sequoia Capital and Kleiner, Perkins, Caufield and Byers. During the same time, the companies which are known now appeared: Federal Express, Apple and Electronic Arts.

The most lucrative years of the US VC market were 1999-2001. The most amount of deals and large investments were made. In 2018 the value of venture investment was \$100 billion and the most invested in sector was software.

Among the successful US start-up, backed by VC, are Juul Labs, SpaceX, Tesla Motors, Uber, Airbnb, Pinterest, Epic Games, WhatsApp, Twitter, Facebook, Apple, Microsoft Google and many others. The services and products of these companies are widely used worldwide (Strebaluev and Gornall, 2015). The US VC market has changed the lives of millions with their creations.

The history of the Russian VC market will be considered later in the dissertation, but the market never had such a boost or success. It can be suggested that there are not any companies which are known around the world, which began as Russian start-ups. Although, there some great ideas, for example: App in the Air. The application offers a virtual assistant, which provides the user with information about the time of completion of check-in and boarding, collects data on flights made and helps to navigate in airports and learn their characteristics using tips from other tourists. Another interesting start-up is Promobot. It is an autonomous robot for business that can communicate with people, recognise faces, answer questions, move around avoiding collisions, move hands and head, broadcast materials on its display and integrate with third-party devices and systems. The company's robots act as administrators, promoters, hostesses, museum guides, consultants, concierges and many others.

Overall, there is an abundance of start-ups, which emerged in Russia, but something is stopping the Russian VC market to become more global, despite the fact that it has potential to offer great ideas and promote innovation.

1.1.3. The Demand for Innovative Products and Services in the Russian Market

Every country is different in its history, mentality and lifestyle, but we are still all part of the same society and in general it could be said that the development stage if the US and Russia is close. Therefore, the Russian people need similar necessities and services offered in the world. However, since not all the potentially good ideas are accepted and promoted in Russia. People use foreign services more and more. The fact that many of the Russian start-ups are not given an opportunity to bring their ideas to life effects the Russian market. This gives a chance to foreign companies to enter the market and offer their services. Despite the fact that there are still a considerable amount of start-ups which were able to enter the market, the US companies have already become more popular and have taken their place. For example, one of the recent Russian start-ups is inDrive. The application offers the service of ordering a taxi, but setting the price the passenger is willing to pay

for the ride. The application is not used as much as Uber, despite the fact that it is a new and an interesting idea.

1.2. Aims and objectives of the research

This dissertation seeks to explore two particular research questions. Firstly, it examines the extent of financial success enjoyed by US VC funded start-up companies. Secondly, it examines the degree to which such companies have established a presence in the product and service markets in Russia. It is hoped that by examining these questions, inferences may be drawn regarding how a potential market demand for innovative products and services in Russia may promote and encourage a more active VC financing landscape in the country such that the barriers posed by government, regulation and monetary policy may be reduced to some extent. Accordingly, this thesis poses the following questions:

RQ1: RQ1: Do US start-up companies funded by VC go on to enjoy financial success?

RQ2: Do US start-up companies funded by VC achieve product or service market success overseas, in particular, in the Russian markets?

To answer the research question, certain areas of the literature must be reviewed. The nature of venture capital financing itself must be considered. This type of investment will be looked at by understanding what it actually is, how venture capital has appeared and has been developing. Venture capital itself is very different from classical types of investment and has its own particularities. Mainly its distinctions are in higher risk and therefore return, the duration of investment period and the payback period (Fedotov, 2019). There are several types of capital depending on the stage of investment; the period itself can take from three to five years. There are usually two types of venture capital investments which are actually similar to regular investments: direct and portfolio investments (Solovyov, 2019). Despite the fact that they are similar they still have their own characteristics if looked at from the point of view of venture capital investment.

Additionally, a sample of US VC funded firms with published financial information and international operations must be selected in order to pursue the research questions. Such companies are identified from online sources and those meet the aforementioned criteria are chosen for inclusion in the study.

In order to examine the financial success of US VC funded firms, a primary objective of the research is to identify metrics of financial performance which may be applied to the financial

statements of US firms financed by VC. These ratios may then be compared against US industry average ratios so that estimations regarding the performance of the firms may be made.

Another key objective of the study is to capture the extent to which sample firms have achieved recognition for their products and services, innovativeness and financial success in the Russian context. To achieve this objective a questionnaire is disseminated to a section of the Russian population. Items included in the questionnaire seek to examine participants relevant knowledge and awareness of sample firms.

Finally, this study aims to synthesize the findings yielded by exploring the research questions by drawing inferences therefrom and making appropriate conclusions.

1.3. Research context

As noted, the US hosts one of the most active VC financing markets. Benchmark is one American venture capital firm whose investments are Twitter and Yelp (Conrad, 2019). Chapter Two will examine how such funds came to become so well-known and successful. Choosing a start-up to invest in is extremely challenging and almost by definition of venture capital is risky. It is interesting to analyse how exactly such funds decide and choose the companies they invest in and which companies do not stand the chance of being invested in. In the US IPOs 50% are backed by VC and these companies account for 20% of the the U.S. market capitalization (Gompers, Gornall, Kaplan, and Strebulaev, 2016).

Additionally, the venture capital market in Russia will be further explored. Even in the USSR there were attempts to emerge venture capital, but it happened in the year 1993 (Urakchiev, 2014). Certain barriers were removed and trade with foreign countries became easier which led to development of foreign investments as well. Although venture capital investments were never a strong side in the investment activity of the Russian Federation now the situation has significantly worsened. The literature review will examine the main problems as to why Russia could never fully develop in this area. The market has never been properly supported, not a lot of resources have been used to strengthen the economy using venture capital. Not only is Russia not attractive, but there are not many venture capitalists that invest in general. The tendencies of venture capital investment in Russia will be examined and some specific traits of the market will be identified. By reviewing the literature in this regard, it will be possible to identify the advantages and disadvantages of

investment in the Russian market. Through determining the disadvantages of the venture capital market the areas which should be improved will be revealed. One of the main disadvantages which might influence the research is that the market is not fully transparent. Most of the deals on the venture capital market are not public and many funds do not even disclose the amount of investments. One of the largest funds in general is Sberbank-500. The fund is governmental which also presents certain complications in relation to the validity of the information. One of the advantages is that the fund is diverse which helps see different perspectives and apply various approaches in their activities.

1.4. Significance of the Study

On a practical level, this study considers one of the world's most developed and lucrative VC markets, that in the US, and seeks to provide recommendations to policymakers in Russia. With the recent changes in governance in Russia, some things are expected to change. The prime minister has assigned people to work on ways how venture investments can be increased. Despite the fact that growth in this sector has been promised at this point no other mechanisms have been developed to improve the market. Of course, with the current worldwide situation the people are more focused on resolving the current crisis and probably later they will be focused on finding solutions to the problems with the ruble, since the currency is experiencing a significant downturn. Thus, it is hard to determine when the government will come back on track to resolve the issue with a steep decline in the venture capital market in Russia. Hence, the last objective of the research is to construct a strategy for Russia how to support the venture capital market.

Chapter Two: Literature Review

2.1. Introduction

This chapter will explore the academic literature on venture capital as a source of finance and consider how it came to be so widely used by start-ups in progressive economies such as the USA. The role of VC funds as investors in the context of agency theory is then considered. The literature review will also distinguish between venture capitalists and business angels. A business angel usually invests into a start-up at a very early stage of the project and basically invests into the creator of the idea more than into the project. Business angels also need to have a profit of \$200,000 each year with a perspective of future growth and own capital of \$1,000,000 (Johnson and Sohl, 2012). Whereas venture capitalists are united into a limited partnership where the partner possesses and uses their venture fund. The relationship between crowdfunding and VC is also considered. The chapter concludes by examining the different opportunities facing start-up firms in the US and Russia so as to establish the context in which the research questions are explored.

2.2. Venture capital

Venture capital is an integral part of economic development of any country. Venture investment or capital has many definitions but it is essentially a high-risk investment in a start-up company which requires financing. Venture capitalists are largely interested in innovative companies. Innovation is directly connected with economic development; therefore, the growth of VC financing is particularly important. Venture investment is risky because the investor is trusting the company to do its best. Sometimes it is difficult to anticipate all of the potential reasons as to why a business might fail. One might then question the rationale for investment in such high-risk ventures? Basically, the main reason is connected to the risk; the riskier the investment - the higher the return. Venture investments may be very profitable.

The average term of venture capital investment is 7-10 years and there are not many ways to back out. The main methods are: either to wait until the company's IPO and sell the shares on the exchange, or to wait for the company to be bought privately (Walker, 2010).

The main characteristics of venture capital are:

- High risk levels;
- A long discrete investment period (3-5 years);

- A long payback period of 5–10 years and sometimes even more;
- A high projected effective rate of return (Fedotov, 2019).

2.2.1. Types of venture capital

The types of VC depend on the aim of investment and the investment horizon. At an early stage of financing, seed financing is used to organise the search and thorough analysis of new business ideas, technologies and products, projects under development or launch, prospective young companies. Seed financing may only be a small amount which can serve as a start-up loan. Start-up financing is needed to complete research and development, create a prototype, formulate a business plan and prepare for launch. Any financing in the early stages often comes from the founders' own funds, but it may also come from funds of attracted individual investors and business angels. First stage financing is directed at organising the production, market launch. Early development capital is used to even out the business processes and the promotion of the product at the start (Fedotov, 2019).

At the expansion stage of financing there are second-stage financing, bridge financing and mezzanine financing. Second-stage financing is used as an additional resource for growth in the market. Bridge financing could help as a short-term interest finance or to assist in the IPOs. Mezzanine capital could be used at the stage preceding the exit from the project, for the purposes of reorganisation and pre-sale preparation (EduPristine, 2017).

Acquisition financing, which is also called buyout financing, could be divided into acquisition finance and leveraged buyout financing. Acquisition finance assists to purchase a part or an entire company. Leveraged buyout financing is used to purchase certain products of another company.

There also can be rescue capital to help save the company from a crises or bankruptcy; and substitutional capital which is designed to replace external debt sources of financing with own funds (Walker, 2010).

2.2.2. Forms of financing

Mostly, cash and cash equivalents are invested, although in some cases are used fixed assets, licenses and intellectual property.

Depending on the legal structure of the transaction, financing most often takes the following forms:

- contributions to the capital of a newly established or existing company;
- ordinary and preferred shares;
- less commonly, bonds and issued loans with the right to convert into shares.

Investments may be independent or part of a broader portfolio. Direct independent investments are typically made by active investors who want to maintain full control over the project until the moment of release. Portfolio investments are typically made by passive investors considering the project, only as a way to make returns on diverse portfolios, and not claiming to participate in management. Because of the associated high level of risk, investors typically do not borrow funds for venture investments (Walker, 2010).

2.2.3. Sources of venture capital

There are several main sources to receive funds for the project. They are the following:

1. Assets of the project initiator - personal savings, money borrowed from private individuals.
2. Attracted funds of an individual investor.
3. Syndicated capital of investors - accumulated funds of several private investors and business angels. Methods of accumulation: start-up exchanges and crowdfunding platforms, closed partnerships and investor clubs.
4. Corporate financing of individual industrial and trading companies, corporations, holdings.
5. Portfolio investments of financial and banking organisations.
6. Capital of private equity investment funds.
7. The capital of state, private-state and private venture funds.
8. Government support in the form of grants and subsidies (Fedotov, 2019).

The joint participation of government and private investors in the formation of venture capital has its advantages and disadvantages. The advantages include the fact that the government takes part of the risks and fundamental possibility of introducing a new product or technology to the market is more certain to happen. The disadvantages include the fact that multiple sources of venture capital generate a complex transaction structure that impedes legal and economic relationships between investors (EduPristine, 2017).

One of the recent examples of a start-up which received funds from venture capitalists is Zoom. Zoom is a platform which provides a service of online conferencing. Zoom was founded by a former vice president of Cisco in 2011. Initially the name of the company was Zoom Video Communications, Inc, which was later changed to Zoom. In the beginning the start-up struggled to find investors, because even at that time the market was full of such platforms and applications. However, the company has received \$3 million of seed money. Zoom started collaborating with software providers and in 2013 raised \$6.5 million in Series B round of financing. In 2014, the start-up received \$30 million in Series C round and \$100 million in Series D. During the pandemic, Zoom has become extremely popular and had circa 300 million users daily.

2.3. History of VC

Venture capital, as an alternative source of financing for private business, originated in the USA in the mid-1950s; in Europe it appeared in the late 70s. Private entrepreneurs did not have free access to sources of equity financing before the appearance of venture capital in Europe. Since the middle of 1980s, European investors have become more interested in investment opportunities in stocks, investing less in traditional fixed income assets. Before venture capital, several sources of financing for small and medium-sized businesses were known. The sources were banking capital, large companies and wealthy people, who were commonly referred to as business angels. To attract the funds necessary for the promotion of the business, an entrepreneur borrowed money from relatives, friends, acquaintances, borrowed from financial institutions using personal assets as collateral, hoping for success and their own strength.

The origins of VC may be traced back to 1957 in Silicon Valley. Arthur Rock, while working for an investment banking firm on Wall Street, received a letter from an engineer from Shokley Semiconductor Laboratories, Eugene Kleiner. William Shockley, the head of the firm, had just won the Nobel Prize for inventing a transistor, but Eugene Kleiner and several of his colleagues were not very happy with their boss. They were looking for a company that would be interested in the idea of producing a new silicon transistor. Rock showed the letter to his partner and convinced him to fly to California together to study Eugene's offer. After their meeting, it was decided that Rock would raise \$ 1.5 million to finance the Kleiner project. Rock appealed to 35 corporate investors, although none of them wanted to participate in financing. Never before had such a specialized company been created for a completely new idea and to finance a theoretical project. It seemed that all the

possibilities were exhausted and the idea was doomed. Yet, by chance, Rock had been advised to speak with to speak with Sherman Fairchild. Sherman himself was an inventor and already had experience in creating new technology companies and had agreed to provide the necessary funds. Thus, Fairchild Semiconductors, the progenitor of all Silicon Valley semiconductor companies, was founded. After that Rock also had invested in Intel and Apple Computer and he became very well-known and successful. As a matter of fact, he seemed to be the first to use the term “venture capital”.

Tom Perkins, another famous venture capitalist, completed his most risky deal in his life at about the same time. Working for David Packard, one of the co-owners of Hewlett-Packard, he invented an inexpensive and easy-to-use gas pumped laser. He invested all his savings in the new company. The product turned out to be so successful that after a short period of time, Perkins managed to sell the company to Spectra-Physics. After that, he also met Eugene Kleiner and devoted himself entirely to the venture capital business. In those years, there were very few venture investors in America. They were Arthur Rock and Tommy Davis in San Francisco, Fred Adler in New York and Franklin Johnson, along with Bill Draper.

It was not easy to create start-up companies in the 1950s: there were not so many real entrepreneurs, and the infrastructure on which one could rely was simply absent. The first fund formed by Rock in 1961 was only \$5 million in size, \$3 million of which was invested. Corporate investors were not interested in investing in financial institutions, the success of which was uncertain. However, the results of the fund's work were great: Rock, having spent only \$3 million, after a short time returned to investors almost 90. Venture capital is also significant in the growth of Cisco Systems, one of the world leaders in the production of network routers and telecommunications equipment. In 1987, Don Valentin of Sequoia Capital acquired a \$2.5 million stake in Cisco. A year later, the value of his portfolio amounted to \$3 billion (Bacior, 2020).

Through the efforts of these people and their followers over the past 30 years, hundreds of thousands of new jobs and billions of dollars in additional income have been created in the US. The emergence of venture capital coincided in time with the rapid development of computer technology and the growing prosperity of the middle class of Americans. Modern computer business giants DEC, Apple Computer, Compaq, Sun Microsystems, Microsoft. Lotus and Intel have managed to

become the major multinational companies they are now, due to the creation and development venture capital. Moreover, the rapid growth of new industries was possible mainly with the help of venture capital investments.

2.4. Venture Capitalists as Investors

In most modern companies of different sizes there is a separation of ownership and control, which constitutes as an agency relationship (Jensen and Meckling 1976; Fama and Jensen, 1983). An agency relationship is formed when there is a principal (the investor) who delegates the responsibility to the agent (the company manager); the agent, in turn, manages the company on behalf of the agent on behalf of the agent. The principal is a significant risk bearer, while the agent makes most of the vital decisions. The agency relationship may lead to the following implications (Osnabrugge, 2000):

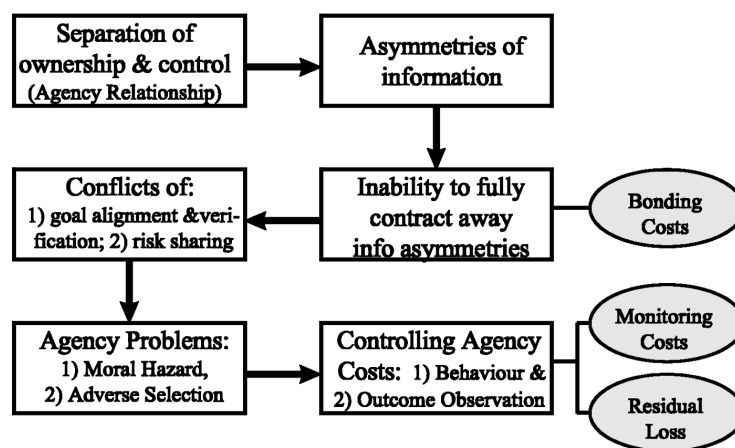


Figure 1: Agency costs

One of the most challenging issues is dealing with moral hazard; the principle, to limit a divergence of their interests with those of the agent, incurs monitoring costs (Osnabrugge, 2000). the contracts can be made more comprehensive by including incentives for management to manage the company optimally. This often takes the form of performance relayed pay structures. Another approach is that the incomplete contracts approach can be used, which stays incomplete and, therefore, the ex post allocation of power is what really matters (Osnabrugge, 2000). For some reason the two types of investors from the same environment use different approaches to control agency problems. Venture capitalists must show their competence from the beginning of the investment process: due diligence, highly attentive contract creation and competent monitoring. Business angels, on the other hand, invest their own funds, which may indicate that they want active participation.

According to Osnabrugge (2000), venture capitalists prefer the principal-agent approach, and business angels prefer the incomplete contract approach to agency risk control.

2.5. Business angels and venture capitalists

Evidently, the terms business angels and venture capitalists are connected. While the two categories share similarities, there are also important distinctions to make between them. Business angels are wealthy individuals who finance the activities of companies at their own expense. Business angels can invest their own funds in the early stages of the development of new startups, receiving in return securities or convertible bonds. Since business angels invest their own funds, they can come from various sources:

- Money earned after the sale of your own company;
- Profit from business activities in other areas;
- Family savings and others.

A business angel need not be a professional investor, but some of them are. SIn order to be accredited by the SEC as a business angel, an individual should:

- Have an income of at least 200 thousand dollars a year earned over the past 2 years, with the possibility of receiving a similar amount or higher in the short-term.
- To have capital in excess of \$ 1 million, excluding the value of immovable objects owned by the person.

There are numerous advantages associated with the use of angel investors as a source of financing, these include:

1. The tendency to take greater risks;
2. Reduced risks for the startup owner using the means of a business angel, since in case of failure, investments are not refundable;
3. The ability to use the knowledge and experience of a business angel which will benefit the new startup.

However, there are also some disadvantages, the main one being that the initiators of start-ups lose part of their managerial powers in relation to their own project. Business angels acquire a stake in a new company, seek to participate in the management of its development, but the managerial role of a business angel is determined by a legally binding contract concluded between the investor and the startup owner.

Venture capitalists are employees of venture capital companies that create funds known as VC funds, often using money from third-party investors, and use the fund to finance start-up companies. Venture capital is a great opportunity for startups that are focused on rapidly developing. These are quite large investments, which the new company must use directly for its intended purpose for its rapid growth. The main advantage of using venture capital is that in the event of a startup's bankruptcy, the company's owner is not obligated to return the attracted investments. Venture capitalists have extensive knowledge and experience. They have connections with other enterprises working in the same field as the invested startup. Venture capitalists can help with attracting qualified specialists and even funds from other investors (Jiang, 2017).

Nevertheless, there are disadvantages associated with using VC as a source of start-up financing. Despite the fact that the startup owner does not undertake to return the funds received in case of failure, venture capitalists always rely on the profit from the investments made. This means that a startup that has received financial support from venture capitalists must plan to succeed in the product/service markets so as to become profitable, enabling it to provide returns to VC investors. Additionally, it may need to plan to list on the stock markets so as to provide the VC investor with an opportunity to sell its stake upon the company reaching a certain size. In some way, venture capitalists also want to have their own stake in a startup in exchange for their investments. This means that the company gives up part of the ownership of the company by attracting funds from venture funds.

VC appears similar to business angels in a practical sense; however, they can also be compared in the context of agency theory. Small firms can be different in size, potential and vision but they can be called 'entrepreneurial firms', which means that they have growth potential, are prone to risk-taking, have an innovative vision and an ability to change (Osnabrugge, 2000). The funds for such firms come from different sources, for example, business angels (BAs) and venture capitalists

(VCs). Both BAs and VCs invest into such risky companies expecting to receive high returns. Business angels are usually private individuals, who sometimes already have their own business of some sort and plan to invest not more than US\$500,000 (Osnabrugge, 2000). Venture capitalists, in general, are professional investors, who try to find a safer venture and can invest more capital than business angels.

2.6. The relationship between venture capitalists and crowdfunding

There is another interesting model of start-up financing besides venture capital, which is crowdfunding. There are four types of crowdfunding: equity - the investors (crowd) invests in an unlisted company with a share exchange, rewards-based - the investors contribute small amounts of money in exchange for some kind of a reward, debt-based - the investors lend the money to the interested party and charity crowdfunding (Liu and Wang, 2018). Basically, any person can contribute as part of crowdfunding, but is the investment going to the right hands to a high quality product or service? Both venture capitalists and crowdfunding can impact society and it is difficult to determine which one can bring more value. Venture capitalists are knowledgeable and experienced investors and in theory are more likely to use their expertise in the right direction, but in the study conducted by Liu and Wang (2018) the local market was segmented into two. On each of them there was a crowdfunding investor. As an outcome the main differences between the venture capitalist and the crowdfunding investor were: venture capitalists analysed both markets carefully, but socially desirable results could always be implemented by the crowdfunding investors. Venture capitalists, on the other hand, can make a wrong launch decision because even if they attempt to boost the product quality, it will be deformed as long as the product has been launched. Ultimately, in certain cases the crowd could make a wiser decision even despite the expertise of a professional investor.

It could be assumed that in order to achieve better results venture capitalists could monitor crowdfunding projects. That idea was discussed by Shang, Yu and Ma (2020) in their study. As a result it turned out that crowdfunding could lead to financing challenges and the fact of venture capitalists monitoring the crowdfunding projects affected their financial performance. It is also difficult for the entrepreneurs to regularly update the reports to create positive social links. The entrepreneurs are not trained enough and the government should help motivate them. At the same time, venture capitalists lack crowdfunding experience and understanding, and need to improve

communication, which needs to be executed through the whole financing process, with the entrepreneurs.

Although crowdfunding and venture capitalists fulfil a similar goal in a way: both forms of venture investments provide capital for start-ups and stimulate innovation, it is better for them to exist separately.

2.7. Venture funds in Russia

In Russia venture firms are called venture funds, although the concepts are different. A venture company is a combination of a number of legal entities. Managing a venture company has certain similarities with managing a startup company. For example, both venture capitalists and start-up founders attract investors and constantly try to raise money; and the process of raising funds for a venture fund usually takes more time than raising funds for a startup. The focus of this section, however, is primarily on venture funds.

The fund manager could be a first time manager, but it does not necessarily mean that the person tries him/herself in venture capital for the first time. It may be a partner who worked in a venture company for a while, but then decided to merge with one or more others and establish his own new management company. Although the person might have had experience in venture capital, he/she could have never raised the fund on their own, hence the name first time fund manager.

The founders of the venture company are called General Partners (GP), and the investors are Limited Partnerships (LPs). LPs can be large corporations, pension funds, wealthy people or charitable foundations. The GP-LP structure agreement technically relates to legal entities formed as part of the fund structure.

2.7.1. Families of Funds

In some cases where the LP exists in jurisdictions other than the fund itself, parallel funds are created and the GPs pool their resources into one fund. Parallel funds invest in the same investments at the same time as the main fund. They invest in each investment together and in parallel with the main fund. The investments are in fixed proportions which are determined by their capital commitments of the fund. They are formed on the same conditions as the main fund, with specific differences in the degree necessary to comply with regulatory, tax or other investment requirements applicable to investors in a parallel fund. In addition, funds created to invest in

specific countries or regions may have separate funds for local and international investors. Ultimately, the parallel fund becomes a 'family of funds' which all participate in one main fund (Solovyov, 2019).

2.7.2. Side funds

There are many types side funds. For example, alternative investment structures can be created as special purpose structures formed to meet the needs of the fund or its' investors in structuring the relationship with one or more specific investments. Unlike a parallel fund, which is designed so that investors can participate in parallel with the main fund, an alternative investment structure is created to allow investors who subscribe to the main fund. This may be to take advantage of an effective structure for storing specific assets if the fund is not an optimal investment tool for specific investments, whether for tax, regulatory or other legal reasons. However, like parallel funds, alternative investment structures have almost the same conditions as the main fund.

Another side fund that a firm can create is the Joint Investment Fund. Joint investment mechanisms are created for joint investment together with a fund and its parallel funds in specific investments. These side investment companies, managed and controlled by managers, and, unlike parallel funds or alternative investment structures, do not necessarily have the same conditions or fees for investments as the fund. Usually, they are formed to accommodate investments made by specific investors on an individual basis. Also, they may include investors who are not necessarily part of the main fund, but to whom managers want to allocate an increased share of a specific investment (Solovyov, 2019).

2.7.3. Investment Team Compensation

20% of the fund's profits are distributed between partners in the firm. It is rare for a new venture capital partner to share the profits of existing investments. Instead, GPs often create a separate pool of percentage of the fund's returns for investments made after the new partner joins the team and decide how interests in future investments will be distributed.

Assignment of rights to the shares depends on the length of the partner's work and the investment term of the fund.

Partners' contribution to capital

LPs usually ask the venture capital firm to contribute 1–2% of the total fund at closing. In new firms, partners who can pay this amount usually fund this commitment. In contrast, in mature firms, partners will finance this obligation based on the distribution of interest on the profit that they agree on.

2% of the capital of the fund paid annually to the management company is usually used to cover salaries and other expenses of the company. Any excess after covering all expenses is usually distributed only among senior partners. In some other cases, it can be used to pay higher salaries to team members as advances against their percentage of the profits of the fund.

The salaries of investment team members vary between new and mature venture capital companies and also depends on the total amount of funds raised. A partner in a new company with a small fund may receive the same compensation as an associate of an older company (Solovyov, 2019).

2.7.4. Fund Performance Indicators

The venture capital fund is evaluated according to two main categories of metrics: Multipliers and Profitability Ratios. In addition, the means are compared with other performance indicators. Venture capital funds can also be compared with other types of funds, other asset classes and public market indices, especially when an institutional investor distributes capital among different asset classes to diversify the portfolio.

When comparing venture capital funds with each other, they are usually grouped according to the strategy or stage of investment, industry, and above all, by the years the fund was founded.

Multipliers and Profitability Ratios are mainly the ratios of capital, investment value and distribution in favour of LP. These amounts change over the life of the fund, which can be eight to ten years, plus one to three years of renewal.

Multipliers

Multiplier	Formula	Definition
DPI: return on equity ratio	$\text{DPI} = \text{total fund income} / \text{fund capital paid by partners.}$	<p>This is an indicator of how much money (cash and shares) the fund returned (minus management fees, expenses and interest) to its LP compared to the capital paid by these LPs.</p> <p>A DPI of two means that the fund returned a two-fold initial paid-up capital (net).</p>
RVPI: Residual Equity Ratio	$\text{RVPI} = \text{residual capital} / \text{fund paid by partners.}$	<p>It shows how much of the capital paid by investors is still invested in the share capital of the portfolio companies of the fund, and is defined as the ratio of the net present value of the portfolio to the total capital paid by investors.</p>

Multiplier	Formula	Definition
TVPI: Overall Implementation Rate	$TVPI = DPI + RVPI$	This indicator combines both of the above indicators, determines how many times the amount of investment at the “exit” has increased. It is the ratio of the total value of investments (consisting of income from realized investments and net present value of the portfolio of unrealized projects) to paid-up capital.

Profitability Ratios

IRR: Internal Rate of Return

Multipliers do not take into account the time value of money, so LP needs more metrics to assess the effectiveness of the fund. The Internal Rate of Return (IRR) complements the multipliers and gives a more accurate assessment of how good the fund was. IRR is calculated based on the cash flow arising from the returns earned by investors net of fees. When the fund makes its initial requirement for the investor to deposit funds in the investment fund in accordance with its obligations, the IRR clock starts. When the fund makes the last distribution in favor of LP, the IRR clock stops. Over this time, there is a series of distributions that make up the fund’s cash flows. It is better for the fund to require the investor to deposit funds in the investment fund in accordance with his obligations only when necessary, to distribute income as soon as possible. This can have a significant impact on the IRR of the fund (but will not have any effect on the multiplier).

2.7.5. Reporting to LPs

Venture capital fund managers typically send quarterly and annual reports to LPs. Most of these reports are generated by the firm's fund administrator (a third-party service provider).

- financial reports;
- investment schedule;
- general report on the activities of the fund (sample annual report);
- account statements;
- tax form for LP.

There is also a hurdle rate, the minimum return level that the manager guarantees LP. Sometimes the term "trigger profitability" is also used. Until the trigger profitability is reached, the manager does not receive the profit. Experienced managers know how tough this condition is and try to avoid or minimize the hurdle rate in every way (Solovyov, 2019).

2.7.6. Russian market trends

The emergence of the venture capital market in Russia is associated with the activities of the European Bank for Reconstruction and Development (EBRD). However, there were earlier attempts to invest in the USSR. An example is the activity of cooperatives and centers of scientific and technical creativity of youth. A characteristic feature of such cooperatives was the unification of the functions of the fund and the management company in one legal entity.

The development of this market began to acquire has started since 1993. The privatisation of industrial enterprises has accelerated the development of the equity investment market. The elimination of some trade and financial barriers allowed foreign investors to gain access to the Russian market.

From 1994 to 1996, the EBRD founded 11 regional venture funds in Russia with capital from \$10 to \$30 million. At the same time, the bank avoided investing in the high-tech sector. The EBRD investment funds were particularly interested in the consumer goods sector.

Around the same time, the International Finance Corporation (IFC) joined the emerging venture capital market. The Russian-American investment program has started. The US-Russia Investment Fund was established with a capital of \$440 million. According to the Financial Times, by the fall of 1997, 26 investment funds with a total capital of about \$ 1.5 billion were operating in Russia.

The first venture capital funds began to appear on the Russian market in 1997. Most of them were closely associated with leading banks and holdings. The 1998 economic crisis threw the nascent environment back several years. More than half of the investment funds operating in the Russian market at that time did not survive the crisis. The 1998 financial crisis hit the investment funds set up by the EBRD just as hard. As a result of changes in management teams, restructuring and liquidation, only three of them - Quadriga Capital, Eagle and Norum - survived into the new century. The establishment in 2000 of the Venture Investment Fund (VIF) - a non-profit organisation with state participation. The main goal of the VIF was to form the organisational structure of the venture capital market in accordance with the strategy approved by the government, as well as to mobilise investments for high-risk high-tech innovation projects.

By 2001, the growth of the equity and venture capital market in Russia resumed. This happened against the backdrop of economic recovery after the crisis and the global boom in Internet companies, which affected Russia later. Yandex, Rambler and Ozon mobilised the first investments and became the leaders of the Russian Internet industry for many years to come. The main trend of the Russian venture capital market emerged: IT companies and enterprises of the consumer sector became stable leaders in terms of attracted financing.

Since 2005, the Ministry of Economic Development of Russia (MED) has been implementing a program to create regional funds to promote the development of venture investments in small enterprises in the scientific and technical sphere. Within the framework of the above program, more than 20 public-private venture funds were created in various regions (Urakchiev, 2014).

Over the past five years, the relationship between the state, venture capital funds and portfolio companies, as well as their role in the market, have changed markedly. The ensuing market collapse and liquidity difficulties faced by the largest LPs, together with unexpectedly low fund returns due to the global financial crisis and the volatility of the IPO market have also played a role. In 2010, the market concluded transactions for the largest recent amount of \$ 26.2 billion.

Due to the lack of funding from private venture capital funds during this period, the role of business angels investing in companies in the early stages, the role of corporate venture capital at later stages of enterprise development, and the role of government incentives and support programs increased. As an active participant in the venture capital market, government agencies and banks are interested in receiving income from their investments, stimulating entrepreneurs and developing the venture market.

Corporate venture capitalists, including those working in traditional industries, were beginning to play an increasingly significant role in investment and takeover of innovative companies. This formed an important part of their global strategy to enter new markets and support internal innovation. Historically, large multinationals have worked closely with the public sector and benefit from government incentives to support innovation and the venture capital market.

One of the conclusions that can be drawn from the results of this period is that public investment in innovation and the venture capital industry has become a key factor in the successful stabilisation and rapid recovery of the economy after the crisis, as well as return to the path of sustainable development (Golubovich, 2015). The volume of government support is one of the key factors in assessing the attractiveness of the country's venture capital market from the point of view of investors. Another conclusion is that investment in knowledge-intensive sectors of the economy contributes to an increase in investment in general, innovation and economic growth.

Currently, Russia is lagging in innovation and is not at the same stage of technological development. There is a problem of lack of a well-established system of financing innovative activities of enterprises and insufficient development of the venture industry. However, the investment capital is large, which can be explained with the fact the the government is one of the key players in the market.

The Russian economy is hugely directed at raw materials and natural resources, and this has been the case for many years. The investment was attractive to venture capitalists, but with the current macroeconomic situation, there are less foreign investors in general (Golubovich, 2015).

Therefore, firstly, it is important to consider national venture investments. There has been a study by Ernst and Young in 2019 on the financial results and tendencies of venture capital market in Russia. The study considered only investments only within the Russian Federation. Venture capital investments were determined as investments in the amount of up to \$150 million (at the weighted average exchange rate of the Central Bank) in risky, technological and potentially highly profitable projects with the expected target of IRR of at least 15%.

In this case, an investment is understood as the acquisition of the share capital, the authorized capital of a non-public company-recipient of investments and / or the provision of debt financing with the possibility of converting shares or equity. Investments can be made by both funds and private individuals or a group of individuals.

When assessing the volume of the Russian venture capital market, only venture capital investments in companies operating primarily in Russia were taken into account. Financing by Russian investors of companies primarily focused on foreign markets was not included in the volume of the Russian venture capital market.

The invested venture projects were divided into four sectors: biotechnological, industrial-technological and internet/software. In 2019, 230 deals took place. There was a decrease compared to 2018 by one and a half times. A decrease in the number of deals was seen in all categories of venture projects, except for the expansion stage of investment. As a result, the growth of investments in the venture capital market compared to last year amounted to 13% with the number of \$868.7 million, excluding exit deals. The average check in transactions with mature projects grew by 1.6 times with the result of \$78.2 million. At the seed stage, it doubled from \$0.1 million to \$0.2 million; at the startup stage, the deals volume increased more than three times - from \$0.3 million to \$1.1 million, although the number of deals in both categories declined. At the seed stage, the number of deals fell by 30% reaching 108. This could be due to the The Internet Initiatives Development Fund (IIDF) decision to slow down support for new startups and start looking for strategists for current projects. IIDF is a Russian venture capital fund established by the Agency for Strategic Initiatives at the suggestion of Vladimir Putin.

In the 2018 the total volume of exits amounted to \$349 million, in 2019 the volume increased almost by 16 times reaching \$5.55 billion, which is a record figure for Russia. The total volume of

transactions reached \$868.7 million - a record in the Russian venture capital segment. The growth rate for the year was 13%, which was due to deals at the later stages of investment. In 2019, corporations exceeded the investment indicators of the previous year and their share in the volume of investments was about a third. The volume of investments in venture by corporations increased by 15% - to \$ 361 million, although the number of transactions fell by half. The growth in inflow is due to the interest in investing in mature companies.

A fairly good picture in the venture capital market was overshadowed in 2019 by corporate conflicts. They also affected the largest venture capital funds - Baring Vostok, Runa Capital, Russia Partners. Many of them were accompanied by criminal cases against investors and entrepreneurs. One of them happened at the beginning of the year - a criminal case against the employees of the oldest fund Baring Vostok Michael Calvey because of a shareholder conflict in Vostochny Bank.

It has become generally accepted that the Russian government, has become a significant player in the segment of early stage companies and a key player in the private equity segment through the participation in venture funds. Therefore, the period from 2018-2020 can be considered the beginning of a new stage. The government is making efforts to attract money to the market from domestic limited partners of large structures, and in the future from non-state pension funds and individuals. For example, the government is implementing an order from the President of Russia to create venture funds with the participation of state corporations. Also, it attracts investments from Russian business in national projects. In the future, it is planned to place pension funds and invest pension savings by non-state pension funds in private equity and venture capital funds. There are plans to create joint funds under the initiatives of a number of government-related structures. The capitalization of operating venture funds increased by 3%. At the same time, the number of new venture capital funds fell by 54%. Capitalisation of venture funds by government capital increased by 13%. Since 2014, the inflow of foreign venture capital into funds focused on the Russian Federation has sharply decreased.

The structure of industry preferences of new VC funds in 2019 did not change much - 2/3 of the funds are focused only on the information and communication technology sector. Many funds that have invested in these sectors were created with the participation of government capital. Despite the fact that after 2014 the participation of foreign funds in investment has significantly decreased, in

2019 foreign funds still appear that make co-investments in Russian companies. Another tendency of the Russian market is the stable growth of corporate funds (EY Dsight, 2019).

2.8. Venture Capital in the US

The VC markets differ depending on the jurisdiction. The US VC market will be considered in this chapter. The investments could be separated by the business cycle stages: seed or angel stage, early or development stage, late/growth or expansion stage. At the seed stage the start up receives the first funds for expansion. Early stage includes the funds which are used for production, sales and marketing. At the expansion stage the company has reached a certain point and has shown growth, but needs additional funds to keep up with the demand. There are also funding rounds which depend on the stages.

There are Series Seed, Series A, Series B, Series C. Series Seed round involves initial funding to start the first market research and early product development. Series A is different from Seed Series in size; Series A is a larger amount of finance which is provided only in case there is progress after the seed finance, the analysis of the market, risks and the team have been successfully conducted. Series A funding covers the market research (in case additional is needed), the costs of the actual product or service provided and the salaries. The most active Series A round investors are: Sequoia Capital, New Enterprise Associates, Google Ventures and many others. Series B financing helps increase the market share and compete at a higher scale in the market. There should be forecasts of the revenues, regulations, performance of the company within the market and the industry. The most active Series B round investors are: General Catalyst Partners, New Enterprise Associates and others. At the Series C round the company is operating stably in the market and has achieved success. The funding is needed to expand and develop even more; the company may be preparing for an IPO. Banks, equity firms and hedge funds are the most common investors in Series C funding (Walker, 2010).

VC investors tend mainly to buy minority equity investments in early-stage companies with high potential for success. Therefore, venture capitalists face more risks on their path, because they also tend to not finance with debt, but use their own funds/equity. However, VC investors try to diversify their investment portfolio, thus, decreasing their exposure to risk. Even if one investment fails to bring profit, they have other investments in their portfolio. Therefore, they do not lose as much as

they could have, having invested a substantial amount on one or two investments. Another investment may bring more returns and cover the losses of the other investment.

2.8.1. Unicorns as a term in the US market

When financing a company an investor is obviously trying to reach the best results possible. In the VC market there is a special term for the most resourceful companies, which are valued over \$1 billion, which is a “unicorn”. In the year 2013 Aileen Lee, a venture capitalist, noticed that such companies were quite rare and decided to research the area. She analysed 60000 software and internet companies which have been funded from 2003 to 2013. She found that only 39 of them are unicorns. Among them were: Facebook, Google and Amazon, which are actually super-unicorn, and much more. Most of the unicorns have emerged in the US. Companies nowadays are able to raise more funds on the early stages of the investment.

2.8.2. Sectors

As it was discussed earlier, the aim of the investors is to find a starting company with the potential of growth, which will bring them higher returns. The sectors which are invested in are software, information and communications technology, pharma, transportation, fintech, artificial intelligence, life sciences, healthcare, biotechnology and security defence.

Mostly the funding in the US comes from the following sources: business angels, who tend to invest into early stage companies; personal savings of the start-up initiators or their families and friends; and VC funds (Tarhuni, Gelfer, Frederick, Stanfill, Stanford, and Le, 2019).

2.8.3. Fund structure

The funds usually obtain finance through private foundations, sovereign funds, financial institutions, pension funds, private foundations, corporations and individuals.

Most VC funds are limited partnerships; the liability is limited among the participants depending on the amounts contributed. The general partner is usually an entity which was created specifically for the management of the fund or a corporation. The partners avert from the double taxation, because all the cash inflows and outflows are received directly by the partners (Tarhuni, Gelfer, Frederick, Stanfill, Stanford, and Le, 2019).

2.8.4. Fund regulation

Venture capital funds are to register as an investment company under the SEC requirements, although certain exemptions exist. There are important players in the VC market besides the funds and investors themselves, who are placement agents. They are organisations which help start ups find potential investors or venture funds. The agents are also called third-party promoters; they must have a broker-dealer license with the Financial Industry Regulatory Authority (FINRA) to conduct their business. Using the services of an unlicensed agent can lead to significant problems not only for the fund, but also for the start-up company. The second player is the investment manager, who is internally connected to the investment fund. The person represents the fund in a way by meeting with the investors and presenting their fund interests. The manager must also have a broker-dealer license. Both general partner entities and the fund manager is required to register with the Securities Exchange Commission (SEC), but there are exemptions (Ross, 2020).

There are certain rules for VC to follow. The fund is not allowed to: borrow or issue debt, provide guarantees larger than 15% of the fund contributions; offer redemption rights; have more than 20% of non-qualifying investments.

The investor within the fund is protected by several aspects. Firstly, there are contractual limitation to the investment activities of the fund. They can include the following guidelines: debt, types of assets to hold, portfolio diversity, environmental and geographical aspects. Secondly, the conflict of interest to considered, because it is an important issue. In general, certain rules have been created in order to eliminate the risk of the mentioned conflict, for example, it is not allowed to form a competing fund. Thirdly, the investors pay attention to the reporting of an entity and the audited reports. Lastly, actions could be suggested depending on a specific situation or a trigger. For example, removal of the general partner or termination of the fund (Tarhuni, Gelfer, Frederick, Stanfill, Stanford, and Le, 2019).

2.8.5. Incentives

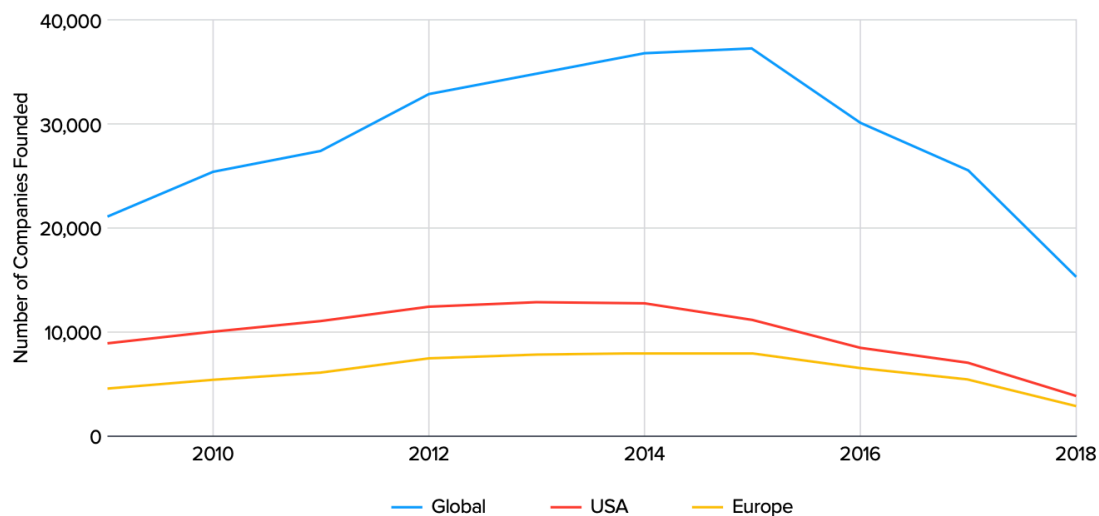
In the USA there is a tax incentive scheme - qualified small business stock status (QSBS). Section 1202 of the Internal Revenue Code allows an investor to exclude from taxable income 100% of gains recognised on the disposition of QSBS in qualifying corporations that has been held for at least five years. The Internal Revenue Code defines QSBS as the stock of an active domestic C corporation whose gross assets, valued at original cost, are below \$50 million on and immediately after its stock issuance. Investors can often exclude the gains from selling QSBS from their taxable

income, in some cases up to the total amount of investment, resulting in tax advantages worth potentially hundreds of millions of dollars.

Another incentive in support VC investment is the share prices themselves. Venture capitalists mainly cover their investment by selling their illiquid investment stakes (Gompers and Lerner, 1999). The stock price indicates the level of the returns which could be expected, hence, singlaling potential investors to purchase it or not (Tarhuni, Gelfer, Frederick, Stanfill, Stanford, and Le, 2019).

2.8.5. Market trends

The VC had been developing quite slowly and has developed its peak in the 2015. Since 2015 there has been a decline in the start-up creation, therefore, there are less fundable start-ups. Below the development of the global, American and European venture capital markets can be seen over the decade:



Source: Crunchbase



Figure 2: Global and Geographic Startup Creating by Year

It could be explained by the fact that the financial reality not matching the romantic, media-fueled perception of contemporary startup culture; and more streamlined pattern-matching of investors' interest, which has narrowed focus into concentrated areas.

Fewer companies even reach Series A investment round due to the fact that investment standards and expectations nowadays are very high. With that, corporate venture capital became more popular. More non-VCs participate in VC deals, for example, sovereign wealth funds, hedge funds and endowments. 72% of sovereign wealth funds, for example, now invest in VC deals directly, with their commitments doubling on a yearly basis (Tarhuni, Gelfer, Frederick, Stanfill, Stanford, and Le, 2019).

The biggest VC funds raised are presented below:

Rank	Fund Name	Fund Owner	Money Raised (\$bn)
1	SoftBank Vision Fund	SoftBank	\$100.0
2	Chinese Reform Holdings Corporation Fund I	Chinese Reform Holdings Corporation	\$15.0
3	Sequoia Capital Global Growth Fund III	Sequoia Capital	\$6.0
4	Tiger Global Private Investment Partners XI	Tiger Global Management	\$3.8
5	NEA 16 Fund	New Enterprise Associates	\$3.3
6	New Enterprise Associates 15	New Enterprise Associates	\$2.8
7	New Enterprise Associates 14	New Enterprise Associates	\$2.6
8	Tiger Global Private Investment Partners X	Tiger Global Management	\$2.5
9	Tiger Global Private Investment Partners IX	Tiger Global Management	\$2.5
10	AH LSV Fund I	Andreessen Horowitz	\$2.0
11	Impact Investment Fund	The Rise Fund	\$2.0
12	Sequoia Capital Global Growth Fund II	Sequoia Capital	\$2.0
13	BVP X	Bessemer Venture Partners	\$1.9
14	Lightspeed Venture Partners Select III	Lightspeed Venture Partners	\$1.8
15	Bessemer Venture Partners VIII	Bessemer Venture Partners	\$1.6

Figure 3: Largest US VC funds raised

In the year 2019, VC funds invested \$136.5 billion into US-based start-ups, based on a report by the PitchBook-NVCA Venture Monitor. Also, in the US, there was also an excess of large deals. The number exceeded 237 deals, where the rounds were larger than \$100 million (Pitchbook- NVCA Venture Monitor). Circa \$400 billion of VC assets is managed by more than 1000 active VC companies. In the year 2018, VC funds received more than \$54 billion in capital, which includes a single fund of \$8 billion. In 2019, US VC funds raised \$46.3 billion. In the US VC deals are mostly concentrated in New York, Massachusetts and California. The deals in these states exceed more than 85% of total VC assets in the USA. The leaders are Los Angeles, New York and the San Francisco Bay Area. With the current situation, there may be a decrease in the VC investment, on the other hand, there may be new ideas to invest in, since people are adapting to the environment and the global life. Covid-19 may open the doors to innovation, but unfortunately, there may not be enough funds to finance the new ideas, since most countries have been experienced an economic decline.

The US government is now more focused on the foreign investments and pay more attention to the foreign ownership of companies. Foreign ownership differs to due certain regulations and obligations which need to be fulfilled. In some cases, the US government can cancel transactions, which is risky (Ducker, 2017).

2.9. The US vs the Russian VC Market

After analysing both the US and the Russian VC market, it can be concluded that they are very different from each other. What unites the two is the participation of the government in both. The role of the state is vital in the success of the markets. However, the approaches of the two governments is completely different. In the US the state plays an important role, creating an environment for the start-up and the venture capital market in general to develop. Hence, many innovative ideas emerge and are applied into the life of society through the hand of the USA. Also, the fact that there were more opportunities for the US market to develop due to the historical events. Russia and previously USSR has suffered a toll of unfortunate events and different events through the decades, which should also be taken into account.

In Russia the government promotes the projects which only seem interesting and beneficial to them, not to the society. Moreover, instead of helping start-ups by funding, it invests into either governmental ventures or companies, which can offer something to the government. Another

problem is that the Russian is highly focused on the natural resources and raw materials. The world is developing faster and embracing the new ways of life, whereas Russia not moving with the same pace. It could be suggested that it is exactly what is stopping the Russian VC market to develop in the right direction.

With that the Russian people are forced to use products and services of other countries, which are moving faster and further to the future. Therefore, many of the services and products created by the US start-ups are used in Russia. This leads to a lead developed economy and stops the country to evolve faster.

Although, it is perceived by many of us that the US companies are extremely successful, is it true? It is challenging to discover whether the US companies have come as far as it is thought to have come. The research will show to what degree did the US companies, which began their activity as start-ups, substitute the products and services which could have been created by the Russian businesses.

Chapter Three: Research Methodology

3.1. Introduction

This chapter will outline the research philosophy guiding the research strategy adopted in the study. In doing so, the research questions are represented so as to justify the methods chosen and the nature of the data employed.

3.2. Research Philosophy

The approach which will be applied to the dissertation is interpretivist because it will help see and analyse more aspects of the conducted study. The research will have the following purposes: descriptive and analytical. To have full understanding of the subject researched certain characteristics of concepts, notions and ideas must be described to obtain useful information in the research. Afterwards the findings are to be analysed and explained to determine certain correlations. To collect information and apply it to the research a deductive approach will be pursued. The collected data will be analysed to come to a conclusions and answer the set questions.

3.3. Research Strategy

This study examines US firms which originated as start-up companies financed by venture capital. Specifically, as mentioned in Chapter One, the research questions examined herein are as follows:

RQ1: Do US start-up companies funded by VC go on to enjoy financial success?

RQ2: Do US start-up companies funded by VC achieve product or service market success overseas, in particular, in the Russian markets?

When people think of the venture capital investment, the USA comes to mind a lot. The US venture capital market is thought to be one the most successful ones in the world. It has been only growing each year. New start-ups emerge in the US every year, coming up with innovative ideas and spreading throughout the world. The Russian market, on the other hand, is very far from being as developed in the area of venture finance and innovation. However, are the American companies as successful as they are perceived to be? It is interesting to see whether they were able to reach success globally even in places which differ so much in mentality, economy and lifestyle.

The primary data will be collected for the research using both qualitative and quantitative methods. As part of the qualitative method, a survey will be conducted, which will determine to what degree the US VC backed companies have filled in the gap in the Russian market.

The quantitative analysis will involve choosing eight American companies which began as start-ups. Calculations of profitability, efficiency, liquidity and gearing ratios will be made in order to determine the financial position of the chosen companies.

3.3.1. Sample selection

As it was discussed earlier, the case study will involve a sample of eight successful US VC backed companies, which began their activity as start-ups. To calculate the necessary ratios company's website and SEC website will be used to analyse the companies' annual reports. Two years of the start-ups activity will be chosen: the year before and after the funding round. The analysis will help determine the actual financial standing of the companies and see whether the companies are indeed successful.

3.3.2. The Case Study Approach

The case study approach was chosen for the research because it will give a deeper view upon the financial standing of the companies. It will eliminate any doubts about the success of the companies' activity and even provide a clearer understanding of their financial strategy.

Ratios employed

The ratios which will be calculated in the research for the chosen companies could be divided into four categories: profitability ratios, efficiency ratios, liquidity ratios and gearing ratios. In some cases, unfortunately, certain information was missing from the annual reports, therefore, some ratios could not be calculated.

To begin the analysis, profitability ratios will be estimated. The ratios will include gross profit, operating profit and net profit margins. Moreover, EBITDA, return on assets, return on capital employed and return on equity will be calculated. With the help of the results of the calculations, the metrics will show the company's ability to generate earnings in relation to other indicators.

As for efficiency ratios, Cash Conversion Cycle to see in what amount of days the company is able to convert its investments in certain resources into cash flows from sale. To achieve that goal,

Inventory Days Turnover, Accounts Receivable Days and Accounts Payable Days will be estimated and summed up. Inventory Days Turnover will show how many days it takes to efficiently manage the inventory. Accounts Receivable and Payable Days will show how fast the company is able receiving and repaying its debtors and creditors. Also, Asset Turnover ratio will be calculate to determine whether the company can generate high revenue using its assets.

Liquidity ratios are vital to determine the current activity of the company; by evaluating the quick, current and cash ratios, it will be clear if it is possible for the company to cover its current liabilities with the liquid resources. Lastly, gearing ratios will determine how efficiently the equity is used and is compared to different forms of debt. Within the group, gearing, leverage, equity, solvency and interest coverage ratio will be calculated. All the formulas are presented in the reference section of the dissertation.

3.3.3. The Survey Method

The Survey Method is useful for the conducted research, because it will give an opportunity to collect the real opinions of Russian people. It is important to add that the opinions might differ due to the fact that the age group of the participants is vast, from 20 to 60 years old.

3.4. Data collection

The survey was conducted in August of 2020, the timeline for the participants to take the survey was a week. The survey is conducted to determine the degree to which the US companies which are backed by VC were able to reach the Russian market. It will show the level of awareness of each company, whether the people use their products services or not, how successful they are considered to be and how important start-ups are for the innovative development. The survey was filled out only by Russian people within the age group from 20 to 60 years old. The exact survey can be found in Appendix A section of the dissertation.

3.5. Conclusion

The chosen methods of data collection will help get a closer look at the financial position of successful US companies backed by venture capital and whether they are so successful that they were able to penetrate the Russian market. The degree to which the companies' products and services are recognised and used by the Russian people within a large age group.

Chapter Four: Analysis

4.1. Introduction

This chapter presents the eight brief case studies of sample companies with the specific aim of assessing their financial success in recent years. It proceeds to present the findings of the survey of Russian citizens so as to analyse the extent to which sample companies have entered into and made a presence in the Russian market. The chapter concludes by synthesizing the findings so that conclusions may be drawn and recommendations made in Chapter Five which concludes the study.

4.2. Case Studies

In this section, American companies, which were, or are still financed by venture capital will be analysed. Their financial statements will be used to calculate their financial position. Their activity will be compared in the year before venture investments were made and after.

4.2.1. WeWork

To begin the analysis it is vital to discuss the background of the companies. Firstly, WeWork will be considered. WeWork originated in the USA in the year 2008 when due to the crisis many Americans lost their jobs. People were not able to afford paying their rent and started to move in with their friends and family. Adam Neumann, one of the founders, decided to rent out a small part of his apartment. Later, he decided to unite with his landlord. The landlord owned another building and offered Neumann to rent each foot for a dollar. Not long after that, Miguel McKelvey became Neumann's neighbour and they both decided to develop a coworking concept on one of the floors of the landlord's building. In 2010 Neumann and McKelvey sold shares and opened their first WeWork in New York. Basically, the concept is that you can rent a desk or a small room, WeWork also offers the services of back office, medical insurance and many others. Some of the members of WeWork are the famous and successful start-ups that we know now, such as Airbnb, Reddit and New York Meetup. In the year 2014 first investments started. WeWork received almost \$500 million and had been expanding ever since. Unfortunately, currently WeWork, which was considered to be a unicorn, is experiencing financial difficulties and the CEO, Adam Neumann, has been deciding on the IPO. In the first 6 months of 2019 the company has had \$690 million losses. Certain board members are discussing the possibility of removal of Neumann as a CEO (Kunthara, 2019).

The largest venture funding round for WeWork was in 2017, when Softbank invested Series G round in the amount of \$4.4 billion. Therefore, the years 2016 and 2017 will be used to calculate the ratios.

The data used for the calculations is presented below:

WeWork \$'000	Indicator	2017	2018
	Revenue	886,004	1,821,751
	Cost of Revenue		
	Operating profit	(931,834)	(1,690,999)
	Interest Income	9,531	37,663
	Interest Expense	15,459	183,697
	Tax Liability/Benefit	(5,727)	(850)
	Net Profit	(933,494)	(1,927,419)
	Cash and cash equivalents	2,020,805	1,744,209
	Depreciation and amortisation	162,892	313,514
	Trade Receivables	35,582	99,525
	Inventory		
	Total Current Assets	2,427,096	2,464,078
	Total Assets	5,354,072	8,644,916
	Trade Payables	314,267	826,396
	Total Current Liabilities	650,587	1,609,088
	Total Liabilities	2,406,511	6,284,159
	Shareholder's Equity/Deficit	(1,302,451)	(2,497,646)
	Total Debt	1,755,924	4,675,071

Table 1. Selected financial data for WeWork 2017-2018

The results of the calculations are presented on the next page:

Ratio Category	Ratio	WeWork	
		2017	2018
Profitability ratios	Gross Profit		
	Operating Profit	-1.05173	-0.9282273
	Net Profit	-1.0536	-1.0580035
	EBIDTA	-751,339	-1,393,395
	Return on Asstes	-0.17404	-0.1956062
	Return on Capital Emplied	-0.19812	-0.2403412
	Return on Equity	0.716721	0.77169423
Efficiency Ratios	Inventory Days Turnover		
	Accounts Recievable Days	14.65843	19.9404996
	Accounts Payable Days		
	Asset Turnover	0.65442	1.34558038
	Cash Convesion Cycle	14.65843	19.9404996
Liquidity Ratios	Quick Ratio	3.160818	1.14582546
	Cash Ratio	3	1
	Current Ratio	3.730625	1.53135068
Gearing Ratios	Gearing Ratio	-1.34817	-1.8717909
	Leverage Ratio	0.32796	0.54078848
	Equity Ratio	-0.24326	-0.288915
	Solvency Ratio	-0.3879	-0.3067107
	Interest Coverage Ratio	-60.2778	-9.2053708

Table 2. The results of the ratios calculations for WeWork 2017-2018

Gross profit margin could not be calculated because cost of sales was not presented in the annual reports of WeWork. Moreover, Inventory days turnover and accounts payable days could not be estimated due to the lack of the inventory and the cost of sales figures. Despite that, the rest of the ratios were calculated successfully.

It could be concluded that WeWork has not been profitable within the two analysed year inspire of the funding by investors. All the figures were negative because profits were negative as well. As for the CCC, it is difficult to come to a conclusion since as it was mentioned earlier, Inventory days turnover and accounts payable days were not calculated.

After calculating liquidity ratios, it could be said that the company's liquid funds have decreased. In the 2017 the figures were between 3 and 4, but in 2018 the liquidity reduced to circa 1 for each ratio. The change indicates an increase in liabilities and a decrease in current assets. Therefore, WeWork is not able to cover its current liabilities as it could.

In the gearing ratios calculations all the results except for the leverage ratio were negative. This occurred due to the negative operating profit and net income. Also, after the investment in 2018, there has still been an equity deficit. The amount of total debt has increased which influenced the results of gearing and leverage ratios. Another positive change occurred in the interest coverage ratio. Despite the fact that the results were negative both years, there was an improvement, which may mean that WeWork will be able to cover its interest expenses soon. It could be suggested that WeWork has been experiencing a downfall recently.

4.2.2. Uber

Second company which will be discussed in the analysis is Uber. The company was founded in 2009 by Travis Kalanick and Garrett Camp. The service started out as a limousine ordering, which was called UberCab. It used to be much more difficult to order a taxi, because the waiting time was longer and the whole process was not convenient. Camp was denied in taxi services in several cab companies, because sometimes he did not have to wait for the ordered cab and used another driver. At this time, iPhones were invented, which means that the GPS services were available for use in the phones. Camp was an engineer and realised that ordering a taxi from a phone was possible and more comfortable. In 2010, when Kalanick and Camp have successfully tested the prototype, they decided to hire staff. In the same year UberCab became available on App Store, but the app only offered a limousine service. People did not mind that the price for a ride was much higher than the market price; they were excited that it could be so easy to order a car and ride comfortably. At the same time UberCab received first seed capital of \$1.25 million. Although, first problem arose, the drivers were not licensed, but Kalanick convinced the authorities that the UberCab was not a cab service, but a service for independent taxi drivers. The name of the company was changed from UberCab to Uber. Later, the version for Android was developed. In the end of the 2011 Uber expanded to other countries and received a second investment round of \$37 million. At first the company was discussing to expand in luxury segment: ordering a jet or a helicopter. Kalanick decided to move in another direction and expand in the mass market, which is what made Uber the way it is today. In 2014 Uber was used in 205 cities and got \$1.2 billion. Summit, Google, Menlo, Sherpa and Wellington were among the investors. In 2014 Uber started developing new functions such as UberEats, UberFresh, UberPOOL and even UberBOAT. Within the same year the company was worth \$40 billion. The company started to implement driverless cars and in the year 2018 one

of such cars hit a woman, but Uber won the case. Uber is still receiving funding every year, therefore, the years 2017 and 2018 because it received series G funding (Uber, 2018).

The data used for the calculations is presented below:

Uber \$'000			
	Indicator	2017	2018
	Revenue	7,932,000	11,270,000
	Cost of Revenue	4,160,000	5,623,000
	Operating profit	(4,080,000)	(3,033,000)
	Interest Income	71,000	104,000
	Interest Expense	479,000	648,000
	Tax Liability/Benefit	(542,000)	283,000
	Net Profit	(4,033,000)	987,000
	Cash and cash equivalents	4,393,000	6,406,000
	Depreciation and amortisation	510,000	426,000
	Trade Receivables	739,000	919,000
	Inventory		
	Total Current Assets	6,837,000	8,658,000
	Total Assets	15,426,000	23,988,000
	Trade Payables	213,000	150,000
	Total Current Liabilities	3,847,000	4,259,000
	Total Liabilities	11,773,000	17,196,000
	Shareholder's Equity/Deficit	(8,557,000)	(7,865,000)
	Total Debt	7,926,000	12,937,000

Table 3. Selected financial data for Uber 2017-2018

The results of the calculations are presented on the next page:

Ratio Category	Ratio	Uber	
		2017	2018
Profitability ratios	Gross Profit	0.47554211	0.50106477
	Operating Profit	-0.5143722	-0.2691216
	Net Profit	-0.5084468	0.08757764
	EBIDTA	-3,515,000	2,448,000
	Return on Asstes	-0.2644885	-0.1264382
	Return on Capital Emplied	-0.352362	-0.1537331
	Return on Equity	0.47131004	-0.1254927
Efficiency Ratios	Inventory Days Turnover		
	Accounts Recievable Days	34.0059254	29.7635315
	Accounts Payable Days	18.6887019	9.7367953
	Asset Turnover	0.82616394	1.17383606
	Cash Convesion Cycle	52.6946273	39.5003268
Liquidity Ratios	Quick Ratio	1.33402651	1.7198873
	Cash Ratio	1.14192878	1.50410895
	Current Ratio	1.77722901	2.03287157
Gearing Ratios	Gearing Ratio	-0.9262592	-1.6448824
	Leverage Ratio	0.51380786	0.53931132
	Equity Ratio	-0.5547128	-0.3278723
	Solvency Ratio	-0.3425635	0.05739707
	Interest Coverage Ratio	-8.5177453	-4.6805556

Table 4. The results of the ratios calculations for Uber 2017-2018

Uber has always seemed as an extremely successful company, therefore, it was interesting to analyse its financial position to see if it is indeed true. All the profitability ratios have changed greatly due to a large positive change in the company's profits: they were negative in 2017 with the amount of -\$4,033 million before the investment and in 2018 the net income was \$987 million. The increase is very impressive and it influenced the company's profitability in a positive way.

The same could be said about the efficiency ratios: the CCC number has decreased, which means that Uber has been receiving back the debtor money and repaying its creditors quicker. The only ratio which could not be calculated because of an indicator absence was inventory days turnover. Liquidity ratios have also increased, which indicates that the company became more able to cover its current liabilities with its current assets.

In the gearing ratios the figures also show overall improvement, although most of the ratios still remained negative after the funding round. The figures are negative, which could be explained only

by the negative operating expenses. The gearing ratio, on the other hand, worsened. It could be explained by an increase in the total debt.

It could be concluded that Uber has proven to be as successful as it was anticipated. The funding has definitely made a difference in the company's financial position.

4.2.3. Peloton

Peloton was founded in 2012 by John Foley, who is the current CEO of the company. As many start-ups are created, the ideas come from inconvenience. Foley and his wife liked to train in groups, but it was difficult for them to get the spots due to their work schedules. Foley decided to help people do the exercises in the groups they want right from their house. Foley attracted \$400,000 of seed money in the same year. In the end of 2012 Foley and his partners attracted \$3.5 million. Peloton is a stair master with a screen in front. By buying the equipment and getting the monthly plan the user receives access to a large library of group exercises which are happening live. The user can interact with the other group members. In 2014 Peloton received \$3.5 million and in 2018 Peloton raised \$550 million at stage F investment, which amounted to \$ 4.3 billion as post-money valuation. Therefore, the years 2017 and 2018 will be considered (Peloton, 2018).

The data used for the calculations is presented below:

Peloton \$'000	Indicator	2018	2019
	Revenue	435,000	915,000
	Cost of Revenue	245,400	531,400
	Operating profit	(47,500)	(202,300)
	Interest Income		700
	Interest Expense	300	
	Tax Liability/Benefit	(100)	(100)
	Net Profit	(47,900)	(195,600)
	Cash and cash equivalents	150,600	162,100
	Depreciation and amortisation	6,600	21,700
	Trade Receivables	9,400	18,500
	Inventory	25,300	136,600
	Total Current Assets	203,800	581,700
	Total Assets	271,200	864,500
	Trade Payables	28,100	92,200
	Total Current Liabilities	170,200	290,800
	Total Liabilities	180,500	462,000
	Shareholder's Equity/Deficit	(315,600)	(538,600)
	Total Debt	10,300	171,200
	Short-term investments		216,000

Table 5. Selected financial data for Peloton 2018-2019

The results of the calculations are presented below:

Ratio Category	Ratio	Peloton	
		2018	2019
Profitability ratios	Gross Profit	0.435862	0.419235
	Operating Profit	-0.1092	-0.22109
	Net Profit	-0.11011	-0.21377
	EBIDTA	-41,100	-173,300
	Return on Asstes	-0.17515	-0.23401
	Return on Capital Employed	-0.4703	-0.35262
	Return on Equity	0.151774	0.363164
Efficiency Ratios	Inventory Days Turnover	3.031501	6.564546
	Accounts Recievable Days	7.887356	7.379781
	Accounts Payable Days	41.79503	63.32894
	Asset Turnover	0.644444	1.355556
	Cash Convesion Cycle	52.71389	77.27327
Liquidity Ratios	Quick Ratio	0.940071	1.363824
	Cash Ratio	0.884841	0.557428
	Current Ratio	1.129086	1.259091
Gearing Ratios	Gearing Ratio	-0.03264	-0.31786
	Leverage Ratio	0.037979	0.198034
	Equity Ratio	-1.16372	-0.62302
	Solvency Ratio	-0.26537	-0.42338
	Interest Coverage Ratio	-158.333	

Table 6. The results of the ratios calculations for Peloton 2018-2019

After estimating the profitability ratios, it could be seen that all the figures, except for the return on equity and gross profit, are negative. The results could be explained by the company's negative profits. Although, in some cases, there is a slight improvement. The ROI figure is positive only due to the fact that income is negative and there is an equity deficit.

The efficiency ratios have shown that Peloton has not allocated its resources effectively. The company's CCC has increased after the funding. In 2019 it took more time for the company to receive money from sales and to repay its creditors. Liquidity ratios have shown only slight changes.

As for the gearing ratios, the interest coverage ratio could not be calculated because in the annual reports of Peloton it is stated that there were not any interest expenses in the year 2019. The gearing

ratio has decreased, which is a negative effect. The company's total debt has increased drastically after the investment in 2019. The equity ratio has improved due to a decrease of an equity deficit. Although, as for the rest of the ratios, there were slight changes both positive and negative.

Another finding is that the interest coverage ratio showed that before the funding the company was unable to cover its interest expenses, but after the investment in 2019, Peloton did not have any interest expenses, only income. Although, the figures are negative and extremely low. The rest of the ratios reflect slight fluctuations.

4.2.4. Pinterest

Pinterest was launched in 2010 by Ben Silbermann and Paul Sciarra. Before starting his own business, Silbermann used to work for Google and left it to follow his dream. He united with Paul Sciarra and they released an App for online shopping on the phone. Unfortunately, the App failed and Ben decided to change his focus. In 2010 Silbermann launched Pinterest which shows a layout of photos. He personally contacted with the first 5,000 users. The growth of the project was slow. Basically, the main concept of Pinterest is that it offers a possibility to add pictures into tabs and create boards. It is also possible to send pictures to friends, give likes and leave comments, share the boards through Facebook and Twitter. The main resource of revenue for Pinterest is advertising. In 2011 Pinterest received \$10 million in Series A financing and the company was valued at \$200 million. In 2013 the company raised \$2.5 million and acquired Livestar and Heckermeter. The company has increased its pace and has been expanding ever since, receiving one of the largest investment in 2015 as Series G round in the amount of \$553 million. The funding rounds were nearly yearly until the year 2017. In 2019 Pinterest had its IPO and was capitalised to almost \$20 billion. The years considered in the analysis will be 2016, since there were not any investments, and 2017 (SEC, 2018).

The data used for the calculations is presented on the next page:

Pinterest \$'000	Indicator	2017	2018
	Revenue	472,852	755,932
	Cost of Revenue	178,664	241,584
	Operating profit	(137,934)	(74,721)
	Interest Income	8,313	13,152
	Interest Expense	112	995
	Tax Liability/Benefit	311	410
	Net Profit	(130,044)	(62,974)
	Cash and cash equivalents	71,468	122,509
	Depreciation and amortisation	16,135	20,859
	Trade Receivables	136,597	221,932
	Inventory		
	Total Current Assets	886,959	889,352
	Total Assets	1,173,045	1,152,731
	Trade Payables	15,428	22,169
	Total Current Liabilities	79,802	108,427
	Total Liabilities	254,110	281,895
	Shareholder's Equity/Deficit	(546,464)	(594,563)
	Total Debt	174,308	173,468
	Short-term investments	640,160	505,304

Table 7. Selected financial data for Pinterest 2017-2018

The results of the calculations are presented below:

Ratio Category	Ratio	Pinterest	
		2017	2018
Profitability ratios	Gross Profit	0.622157	0.680416
	Operating Profit	-0.29171	-0.09885
	Net Profit	-0.27502	-0.08331
	EBIDTA	-105,173	-27,558
	Return on Asstes	-0.11759	-0.06482
	Return on Capital Employed	-0.12617	-0.07155
	Return on Equity	0.237974	0.105916
Efficiency Ratios	Inventory Days Turnover		
	Accounts Recievable Days	105.4408	107.1593
	Accounts Payable Days	31.51849	33.49429
	Asset Turnover	0.769626	1.230374
	Cash Convesion Cycle	136.9593	140.6536
Liquidity Ratios	Quick Ratio	10.62912	7.837024
	Cash Ratio	0.895567	1.129875
	Current Ratio	11.1145	8.202311
Gearing Ratios	Gearing Ratio	-0.31897	-0.29176
	Leverage Ratio	0.148594	0.150484
	Equity Ratio	-0.46585	-0.51579
	Solvency Ratio	-0.51176	-0.2234
	Interest Coverage Ratio	-1231.55	-75.0965

Table 8. The results of the ratios calculations for Pinterest 2017-2018

In the financial statements of Pinterest the income results are negative which influenced the results of the profitability ratios. Although, all in all, there was a slight improvement after the financing round.

In the efficiency ratios, the inventory days turnover could not be estimated due to the absence of the inventories figures. Therefore, only accounts receivable and accounts payable days could be evaluated within the CCC. Pinterest has the one of the highest numbers of the selected companies; the CCC showed that the company's debtors do not repay the debts within almost 100 days. However, Pinterest repays its creditors within 30 days. It indicates that Pinterests pays more money than receives, which is not a positive tendency and approach.

In general, the liquidity figures are high, but they have decreased after the investment. Overall, the company is able to cover its current liabilities despite the fact that the CCC figures show that the company is not receiving the debtors funds fast enough, which is interesting.

As for the the gearing ratios, the results are all negative, except for the leverage. Despite that, most of them have improved after the funding round. However, the equity ratio has worsened due to an increase in the company's equity deficit and a decrease in their total assets.

4.2.5. Tesla Motors

Tesla Motors was founded by two business partners Martin Eberhard and Marc Tarpenning in 2003. Both of them heard that Elon Musk was considering to invest into the electrocar industry and decided to ask him to be the first investor into their idea. Elon Musk has invested \$6.5 million as part of the Series A round of finance which totalled \$7.5 million. into the company in 2004. Next year Elon arranged a start-up partnership with Lotus Cars, which produced sport cars. In the year 2006 the idea was to create a sports car, which will not need gasoline. In 2008 both Eberhard and Tarpenning left the company to develop other projects of similar nature, which left Elon Musk in charge and made him the CEO of Tesla Motors. Tesla was receiving a lot of finance, but not only from large companies and business angels; in 2009 Tesla Motors raised \$465 million from the United States Department of Energy. Later, in 2010, Tesla Motors had its first IPO and as a result attracted \$226.1 million. Since then the company has been receiving post-IPO capital finance. The last round of Series financing was round C in the amount of \$40 million. Although, the fact that the start-up became successful quite quickly, Tesla Motors also has Post-IPO Debt. The last post-IPO Debt was in 2020 reaching \$565 million. The years which will be taken for the analysis are 2015

and 2016 due to the fact that in the year 2016 the company raised \$1.4 billion. The money was invested by Goldman Sachs, Bank of America Merrill Lynch, Deutsche Bank, Citigroup, and Morgan Stanley (Tesla Motors, 2016).

The data used for the calculations is presented below:

Tesla \$'000	Indicator	2015	2016
	Revenue	399,619	730,342
	Cost of Revenue	280,791	478,922
	Operating profit	(647,790)	(650,341)
	Interest Income		
	Interest Expense	183,974	143,473
	Tax Liability/Benefit	(3,326)	308
	Net Profit	(768,822)	(820,347)
	Cash and cash equivalents	382,544	290,710
	Depreciation and amortisation	422,590	308,773
	Trade Receivables	33,998	66,949
	Inventory	342,951	172,713
	Total Current Assets	902,138	692,925
	Total Assets	7,287,118	9,130,756
	Trade Payables	364,973	207,643
	Total Current Liabilities	1,193,362	1,519,307
	Total Liabilities	5,552,555	6,855,703
	Shareholder's Equity/Deficit	1,413,628	1,931,430
	Weighted-average shares outstanding	1,195	1,301
	Total Debt	2,753,746	3,580,405
	Short-term investments		11,311

Table 9. Selected financial data for Tesla Motors 2015-2016

The results of the calculations are presented on the next page:

Ratio Category	Ratio	Tesla	
		2015	2016
Profitability ratios	Gross Profit	0.297353	0.34425
	Operating Profit	-1.62102	-0.89046
	Net Profit	-1.92389	-1.12324
	EBIDTA	-165,584	-367,793
	Return on Asstes	-0.0889	-0.07123
	Return on Capital Emplied	-0.1063	-0.08544
	Return on Equity	-0.54386	-0.42474
Efficiency Ratios	Inventory Days Turnover	1.089046	5.545871
	Accounts Recievable Days	31.05275	33.45882
	Accounts Payable Days	474.4281	158.2506
	Asset Turnover	0.707315	1.292685
	Cash Convesion Cycle	506.5699	197.2553
Liquidity Ratios	Quick Ratio	0.349049	0.242854
	Cash Ratio	0.32056	0.191344
	Current Ratio	0.755963	0.45608
Gearing Ratios	Gearing Ratio	1.947999	1.853759
	Leverage Ratio	0.377892	0.392126
	Equity Ratio	0.19399	0.21153
	Solvency Ratio	-0.13846	-0.11966
	Interest Coverage Ratio	-3.5211	-4.53285

Table 10. The results of the ratios calculations for Tesla Motors 2015-2016

It is important to mention that Tesla Motors' annual reports were the clearest of all the analysed reports; all the figures were available to be found. Tesla's annual reportsIt was surprising to discover that Tesla Motors is not as profitable as it was expected as it can be seen after calculating the profitability ratios. Tesla's operating profit and net income are negative. However, the figures have improved after the funding round in 2016.

Another important finding was discovered in the efficiency ratios estimates. Tesla's days of repaying its creditors have decrease a lot, and their debtors repay the company quite quickly without drastic changes within the two years. Although, the company has great results in receiving money from the sales of inventory, the figure has worsened after the investment. The results showed that the CCC has improved considerably: in 2015 the CCC result was almost 507 days and in 2016-197 days.

The liquidity ratios indicate that Tesla's ability to cover its current liabilities has not been very strong and has slightly decreased. With that, it is important to point out that Tesla is one of the two companies, from the analysed start-ups, which does not have an equity deficit. The company's gearing ratios show adequate figures with two exceptions: solvency ratio and interest coverage

ratio. The figures are negative, but it can be explained by the negative operating profit and net income.

4.2.6. SendGrid

SendGrid was founded by Isaac Saldana, who later recruited Jose Lopez and Tim Jenkins in 2009. In the same year the start-up raised \$750,000 as a Series A round. SendGrid is a service which allows to send emails without an actual email server. The service makes the process of sending and receiving emails easier. For example, sometimes because of sending and getting many emails, the email providers can mark messages as spam. Also, SendGrid makes sure that the person will actually receive the email. The service provides different types of email: friend requests, notifications, newsletters and confirmations. One of the largest funding rounds was in 2016 in Series D funding in the amount of \$33 million, which led to the company's IPO in 2017; the company raised \$131 million. Therefore, the year 2015 and 2016 will be considered in the research (SendGrid, 2016).

The data used for the calculations is presented below:

SendGrid \$'000	Indicator	2015	2016
	Revenue	58,476	79,929
	Cost of Revenue	18,961	21,605
	Operating profit	(5,659)	(3,601)
	Interest Income		
	Interest Expense	165	195
	Tax Liability/Benefit		
	Net Profit	(5,854)	(3,908)
	Cash and cash equivalents	9,680	40,478
	Depreciation and amortisation	5,521	6,913
	Trade Receivables	2,629	4,119
	Inventory		
	Total Current Assets	13,962	47,200
	Total Assets	24,676	66,635
	Trade Payables	3,583	7,771
	Total Current Liabilities	8,297	13,425
	Total Liabilities	12,764	23,727
	Shareholder's Equity/Deficit	(35,947)	(37,780)
	Total Debt	4,467	10,302

Table 11. Selected financial data for SendGrid 2015-2016

The results of the calculations are presented below:

Ratio Category	Ratio	SendGrid	
		2015	2016
Profitability ratios	Gross Profit	0.675747	0.729698
	Operating Profit	-0.09677	-0.04505
	Net Profit	-0.10011	-0.04889
	EBIDTA	-168	3,200
	Return on Asstes	-0.22933	-0.05404
	Return on Capital Emplied	-0.3455	-0.06768
	Return on Equity	0.162851	0.103441
Efficiency Ratios	Inventory Days Turnover		
	Accounts Recievable Days	16.40989	18.80963
	Accounts Payable Days	68.97289	131.2851
	Asset Turnover	0.844998	1.155002
	Cash Convesion Cycle	85.38279	150.0948
Liquidity Ratios	Quick Ratio	1.483548	3.321937
	Cash Ratio	1.166687	3.015121
	Current Ratio	1.682777	3.515829
Gearing Ratios	Gearing Ratio	-0.12427	-0.27268
	Leverage Ratio	0.181026	0.154603
	Equity Ratio	-1.45676	-0.56697
	Solvency Ratio	-0.45863	-0.16471
	Interest Coverage Ratio	-34.297	-18.4667

Table 12. The results of the ratios calculations for SendGrid 2015-2016

SendGrid has experienced a stable improvement of its profitability with a slight decrease in the ROE. The company's EBITDA has increased greatly from -\$168 million to \$3,200 million. Not all the company's efficiency ratios could be estimated due to the lack of inventory figures. It could be said that its efficiency has decreased after the funding round. The company's ability to receive back and repay the debts has worsened, which led to a large increase in the CCC results. Although, the asset turnover has improved well due to an increase in assets and sales.

SendGrid's liquidity figures have improved after the funding round which indicates that the company is able to cover its current liabilities better than before the investment. Overall, the gearing ratios have also improved with the exception of the leverage ratio.

Most of the gearing ratios, while remaining negative after the investment round, have improved. Although, the leverage ratio, being positive, has decreased due to an increase in SendGrid's total debt.

4.2.7. Apellis Pharmaceuticals

Apellis Pharmaceuticals is a company that focuses on developing a platform which includes novel therapeutics and drug delivery technologies to address chronic inflammatory diseases. Its last round was Series E of \$60 million. In the research it has been decided to compare the financials of 2018 and 2019. In 2018 there were not any investment made, whereas in 2019 there were post-IPO funding in the amount of \$220 million (Apellis Pharmaceuticals, 2018).

The data used for the calculations is presented below:

Apellis \$'000			
	Indicator	2018	2019
	Revenue		
	Cost of Revenue		
	Operating profit	(127,924)	(288,015)
	Interest Income	2,961	5,109
	Interest Expense	2,513	5,285
	Tax Liability/Benefit	(26,776)	(63,989)
	Net Profit	(127,502)	(304,707)
	Cash and cash equivalents	176,268	351,985
	Depreciation and amortisation		240
	Trade Receivables		
	Inventory		
	Total Current Assets	202,439	373,095
	Total Assets	203,534	389,245
	Trade Payables	10,255	8,361
	Total Current Liabilities	17,025	65,753
	Total Liabilities	42,561	355,015
	Shareholder's Equity/Deficit	160,973	34,230
	Total Debt	25,536	289,262

Table 13. Selected financial data for Apellis Pharmaceuticals 2018-2019

The results of the calculations are presented below:

Ratio Category	Ratio	Apellis	
		2018	2019
Profitability ratios	Gross Profit		
	Operating Profit		
	Net Profit		
	EBIDTA	-148,804	-358,062
	Return on Asstes	-0.62851	-0.73993
	Return on Capital Employed	-0.68589	-0.89033
	Return on Equity	-0.79207	-8.90175
Efficiency Ratios	Inventory Days Turnover		
	Accounts Recievable Days		
	Accounts Payable Days		
	Asset Turnover		
	Cash Convesion Cycle		
Liquidity Ratios	Quick Ratio	10.35348	5.35314
	Cash Ratio	10.35348	5.35314
	Current Ratio	11.89069	5.67419
Gearing Ratios	Gearing Ratio	0.158635	8.45054
	Leverage Ratio	0.125463	0.743136
	Equity Ratio	0.79089	0.087939
	Solvency Ratio	-2.99575	-0.85829
	Interest Coverage Ratio	-50.9049	-54.4967

Table 14. The results of the ratios calculations for Apellis Pharmaceuticals 2018-2019

It was difficult to find a lot of information about the company in general and its annual reports were among the least clear ones to analyse. Hence, half of the ratios could not be calculated. Apellis Pharmaceuticals' profitability figures were negative due to the negative profits. After the funding, the profitability ratios have decreased slightly.

The efficiency ratios could not be calculated due to the lack of the necessary figures. As for the company's liquidity ratios figures, the company shows quite strong results, although after the finding the numbers have decreased. It could be explained by a large increase of the company's current liabilities, however, its current assets have also experienced an increase. Apellis Pharmaceuticals have taken a lot of new debt from creditors. It can be seen on the figures of their total liabilities.

The company has a deficit in equity and the results of the gearing ratios calculations demonstrate that they are negative. Although, the company's gearing, solvency and equity ratios have slightly

improved. On the other hand, the leverage ratio has experienced a decrease due to a large increase in the company's total debt: being \$25,536 million in 2018 and \$289,262 million in 2019. Overall, it is difficult to make a clear conclusion about the financial position of Apellis Pharmaceuticals because most of the ratios could not be calculated.

4.2.8. Lyft

Lyft is another example of a successful start-up, but it all begun with Zimride. In 2007 Logan Green and John Zimmer founded a company called Zimride. The concept was focused on long distanced ride-sharing. However, the service lacked the short distance rides, which led to the idea of Lyft in 2012. The idea was to find a driver via the application and both the passenger and the driver were able to rate each other depending on their behaviour and service. The venture investments began in 2008 with the seed capital of \$1.4 million. Then Series A round began in 2011 in the amount of \$6.2 million. Last Series round was Series G, which reached \$600 million. The company has received unattributed funding in 2018. Currently, the company is valued at \$15.1 billion. Hence, the years considered in the research are 2017 and 2018, because they are more current to the research in terms of financing (SEC, 2018).

The data used for the calculations is presented below:

Lyft \$'000	Indicator	2017	2018
	Revenue	1,059,881	2,156,616
	Cost of Revenue	659,533	1,243,400
	Operating profit	(708,272)	(977,711)
	Interest Income	20,243	66,462
	Interest Expense		
	Tax Liability/Benefit	556	738
	Net Profit	(688,301)	(911,335)
	Cash and cash equivalents	1,106,102	517,690
	Depreciation and amortisation	2,611	18,752
	Trade Receivables		
	Inventory		
	Total Current Assets	2,563,695	2,320,442
	Total Assets	3,016,727	3,760,043
	Trade Payables	66,974	32,343
	Total Current Liabilities	696,818	1,448,819
	Total Liabilities	712,116	1,479,277
	Shareholder's Equity/Deficit	(1,979,438)	(2,871,281)
	Total Debt	15,298	30,458
	Short-term investments	1,294,642	1,520,180

Table 15. Selected financial data for Lyft 2017-2018

The results of the calculations are presented below:

Ratio Category	Ratio	Lyft	
		2017	2018
Profitability ratios	Gross Profit	0.377729	0.423449
	Operating Profit	-0.66826	-0.45335
	Net Profit	-0.64941	-0.42258
	EBIDTA	-664,891	-825,383
	Return on Asstes	-0.23478	-0.26003
	Return on Capital Emplied	-0.3053	-0.42303
	Return on Equity	0.347725	0.317397
Efficiency Ratios	Inventory Days Turnover		
	Accounts Recievable Days		
	Accounts Payable Days	37.06488	9.494286
	Asset Turnover	0.659028	1.340972
	Cash Convesion Cycle	37.06488	9.494286
Liquidity Ratios	Quick Ratio	3.445296	1.406573
	Cash Ratio	1.587361	0.357319
	Current Ratio	3.679146	1.601609
Gearing Ratios	Gearing Ratio	-0.00773	-0.01061
	Leverage Ratio	0.005071	0.0081
	Equity Ratio	-0.65615	-0.76363
	Solvency Ratio	-0.96656	-0.61607
	Interest Coverage Ratio	-34.9885	-14.7108

Table 16. The results of the ratios calculations for Lyft 2017-2018

Lyft's profits are negative, therefore, its profitability ratios are negative. The return on assets, investment and equity have decreased after the funding round in 2018. As for the efficiency ratios, inventory turnover and accounts receivable days could not be calculated due to the absence of the relevant indicators. However, Lyft's results of accounts payable days have changed greatly, which indicates that they repay their credits quicker after the investments were made. Also, asset turnover indicator has slightly improved. After calculating the liquidity ratios, the result demonstrate a decrease in all of the indicators, which can be explained by a large increase in current liabilities and a decrease in liquid funds.

Most gearing ratios are negative due to an equity deficit, increasing total debt and negative profits, however, most of the ratios have improved with one exception: the equity ratio. The decline could be explained by a large increase in the equity deficit after the funding round.

It could be concluded that Lyft has experienced a worsening in its financial standing after the financing in 2018.

4.3. The Survey

The survey was conducted within a large age group from 20 to 60 years old to discover the awareness of the citizens of Russia about the US start-up market. Also, it was important to consider which American start-ups were able to expand its activity to the Russian Federation.

The total number of respondents was 76, from those: 65% were from the age of 20 to 25; 15% were from the age of 25 to 40; 20% from the age of 40 to 60. All of the respondents come from different backgrounds and have received different education.

The results of the survey indicate that as for the awareness about the companies and their origin more than 50% of the respondents have identified Uber, Pinterest and Tesla Motors. The same could be said about the awareness of the companies' start: Uber, Pinterest and Tesla Motors. Most of the respondents have used the products and the services Uber, Pinterest and Tesla Motors as well.

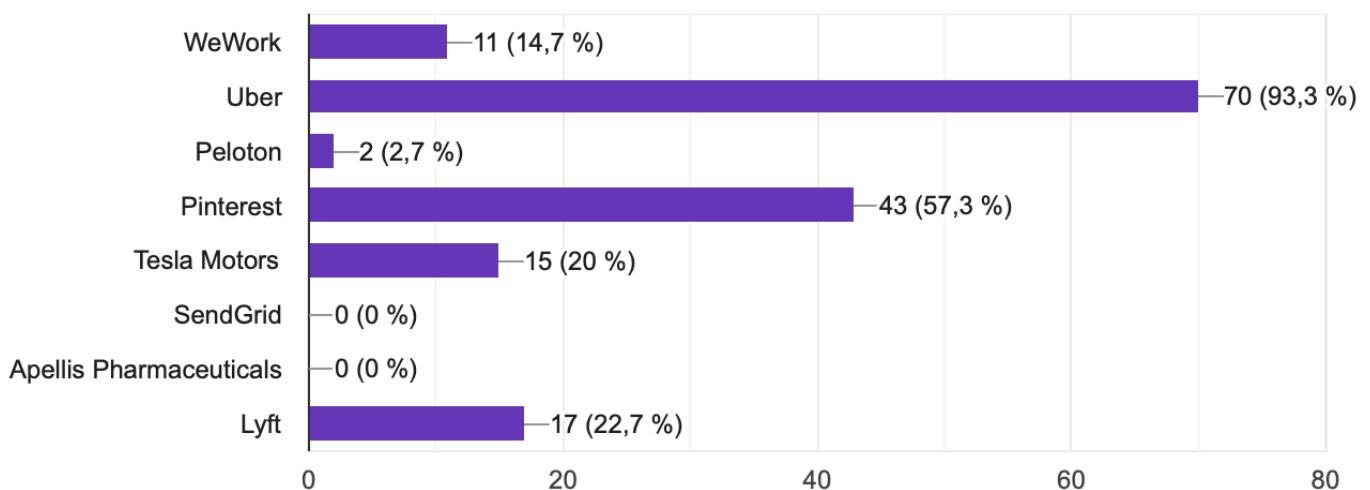


Figure 4: The most consumed products or services according to the survey

The most successful companies were perceived by the respondents to be Uber and Tesla Motors with the results of 76.8% and 81.2% respectively.

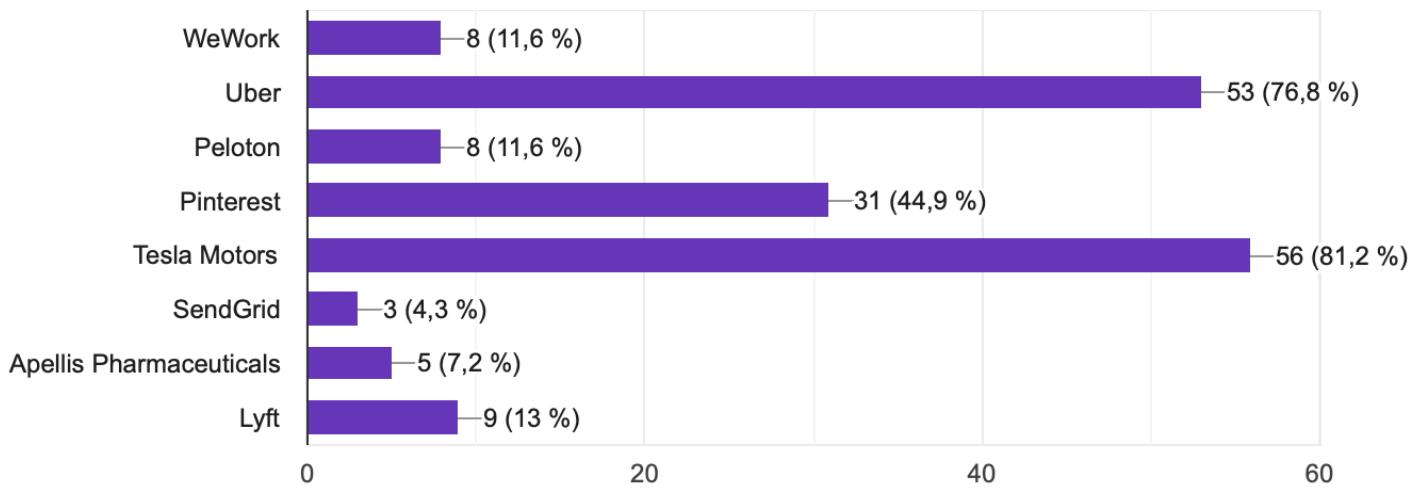


Figure 5: The most successful companies according to the survey

The companies were also chosen to be the most profitable, however, Uber was considered to be more financially successful with the result of 66.7%, whereas, Tesla Motors got 62.7% of votes.

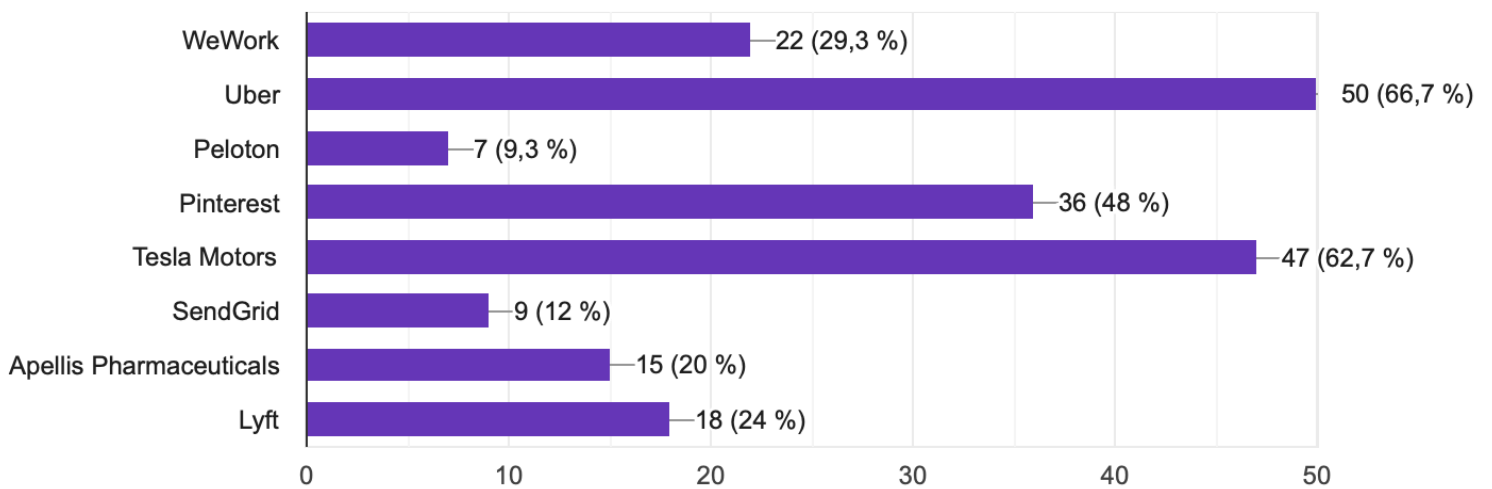


Figure 6: The most profitable companies according to the survey

Uber, Pinterest and Tesla Motors, although, Uber is both used and recognised by the Russian respondents the most. The least recognised companies were SendGrid and Apellis Pharmaceuticals in all of the questions.

74.7% of the respondents would prefer the annual reports to be publicly available before investing into a start-up. Only 9.3% replied that they do not consider publicly available financial statements important to invest into a company; the rest were not sure.

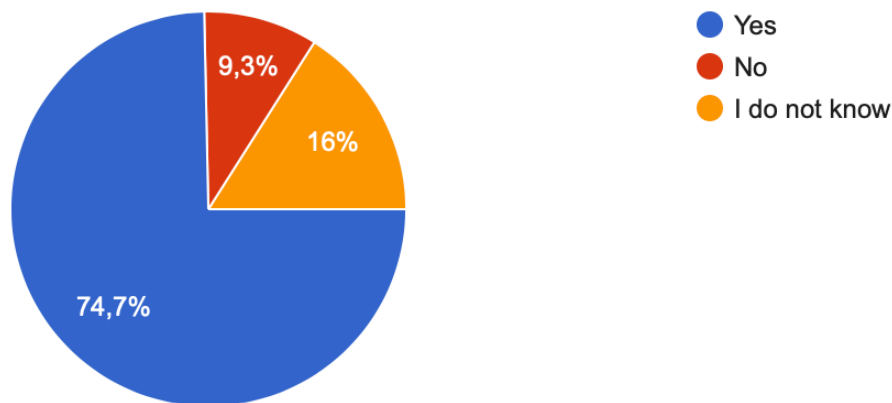


Figure 7: The level of importance of publicly available annual reports according to the survey

46.1% of the respondents have agreed with the statement that start-up drive innovation.

4.4. Discussion

It can be concluded from the calculations that overall the companies are not profitable; their profits were negative. Most of them could not manage to improve their financial position after the funding rounds. The companies which stood out the most were Uber, Tesla Motors, Apellis Pharmaceuticals and SendGrid. Almost all the companies experienced an equity deficit before and after the investment rounds.

The efficiency ratios could not have been calculated completely due to the lack of some of the information. Also, the companies operate in different industries, which could mean that their financial data may vary. Although, it is worth to mention that Lyft was successful to decrease account payable days from 36 to 9 days. Pinterest, on the other hand, receives money from their debtor much slower than repays it to their creditors, which could lead to many financial problems. Pinterest may not have enough funds to cover their liabilities at all. Most companies have shown

strong results in their liquidity ratios. Most gearing ratios show negative results only mostly due to large equity deficits each year.

Also, it was extremely surprising to find out that the companies' annual reports were not very clear to understand. For the companies which had their IPOs, it is very unusual. However, Tesla Motors' financial statements were the most convenient ones to use, all the relevant information was clear could be easily found.

Apellis Pharmaceuticals' annual reports were the most unclear and the data was difficult to find. It should be noted that it was extremely to hard enough information about the company and its history in general.

In the survey it was unexpected to discover that more than 50% of the respondents were not aware of WeWork, because the company was very popular in the US for quite a long time, but at the same time it could be explained by the fact that the founder never considered expanding to Russia, although, they could have achieved success.

Despite the fact that Apellis Pharmaceuticals and SendGrid was among the least recognised companies among the participants of the survey, it was still considered financially profitable among 21.1% of the respondents.

Another surprising finding was that 9.9% consider available annual reports not an important factor before investing into a start-up.

4.5. Conclusion

To conclude, the survey has identified that despite the differences between the knowledge, age and lifestyles of the respondents, most of them understand the importance of start-up development in our lives. Also, the obvious leaders of the survey were Uber, Pinterest and Tesla Motors. It could be said that Uber is the most popular company among the analysed companies.

Chapter Five: Conclusion

5.1. Introduction

The conducted research helped answer the set questions effective using the case study and the survey. Let us consider what final conclusions could be made.

5.2. Conclusions

Let us consider the conclusions, which could be drawn from the case study and the survey. After conducting the case study it was very unexpected to find that all the analysed companies have decreasing operating profit and net income before and after the investment round with one exception, Uber. Uber's profits increased greatly after the investment was made from the -\$4,033 million in 2017 and \$987 million in 2018, which makes the company definitely the most profitable among the analysed companies.

Efficiency ratios could give a full picture because it was not possible to calculate all the ratios due to the lack of certain indicators in the annual reports of most companies. However, only Tesla Motors' and Peloton's could be fully analysed. According to the calculations Tesla Motors was able to decrease its Cash Conversion Cycle from 506 to 197 days, which is a great result, whereas Peloton's CCC only increased after the funding round.

SendGrid showed the strongest results in the liquidity ratios estimations due to the fact that they were able to increase its ability to cover its current liabilities with liquid resources the most after the investment.

Lastly, as for gearing ratios, it was interesting to find out that most companies actually had an equity deficit before and after the funding rounds. The exceptions were Tesla Motors and Apellis Pharmaceuticals. Apellis Pharmaceuticals' results of the gearing ratios estimations were overall quite good. Uber was able to decrease the equity deficit, while the rest of the companies have experienced an increase in the deficit.

It could be concluded that the most financially profitable companies are Uber, Tesla Motors, Apellis Pharmaceuticals and SendGrid according to the calculations made.

The survey definitely alienated three “leaders” among the respondents, which were Uber, Tesla Motors and Pinterest. The companies were recognised by the respondents and in general in the research. The mostly used products or services among the respondents was Uber with 93.3% and Pinterest with 57.3%. However, Uber and Tesla Motors were considered to be the most successful and financially profitable.

Also, despite the knowledge and the backgrounds of the respondents, most of them considered publicly available annual reports to be an important aspects to discuss before investing in a start-up. Most participants of the research agree that start-ups are the source of innovation in the world.

Despite the fact that, the case study has shown that Uber, Tesla Motors, Apellis Pharmaceuticals and SendGrid. Apellis Pharmaceuticals and SendGrid were one of the least recognised companies in the survey. Hence, it could be suggested that Uber and Tesla Motors were the most successful companies to penetrate the Russian market.

Uber among the most popular applications for ordering a taxi in Russia, therefore, the results confirmed its success. Although, despite the fact that almost none of the respondents have used the products of Tesla Motors, it was still recognised as one of the most successful companies. To me the most successful company from the analysed ones is Tesla Motors. Their products are used in Russia extremely rarely due to the lack of facilities to use such products in general. It could be suggested that the respondents who replied that they have used their products have probably used them abroad and not in Russia. The fact that without a broad experience of using the products of Tesla Motors, there is a high awareness level among a large age group of the respondents. It could be concluded that the companies strategy in business is very effective and the company has an amazing leader. However, the research is focused on the success in filling the gap in the Russian market and, therefore, the most successful company in that sense is Uber. In Russia it is used much more often than the Russian alternates to such services. Hence, Uber is very successful in entering the Russian market.

5.3. Recommendations

Unfortunately, the Russian market is full of great potential people, who are able to bring a variety of amazing ideas to life, and not given the opportunity to. This lets foreign companies substitute the Russian businesses, which prevents the economy of the Russian Federation to develop.

This study has found that many of the largest and most innovative US firms have not fully captured the Russian market. Accordingly it highlights a gap in the market for Russian entrepreneurs and recommends that they seek VC financing in order to pursue business ideas. This of course rests on the government and policymakers' willingness to reduce the regulatory barriers which inhibit free movement of VC financing in Russia.

It could be said that the government in Russia should play a lesser role in the VC market and make it easier for the companies to enter the market. Because at this point, the companies, which receive funding and are promoted, are usually somehow connected to the government. The companies which are hugely funded are beneficial to the government and not to the society. By doing so, great interpreters will not be forced to leave Russia to start their business somewhere else. Also, the active venture funds of Russia will invest more into the Russian market and not the foreign.

Since the study has shown that even such large companies could not enter the Russian market, the VC investors should try to invest more into national businesses and not try to find options abroad. This will form a great environment for entrepreneurs to work in and create in Russia. However, this could only work with if the Russian government and the VC investors work together to give opportunities to the Russian entrepreneurs.

5.4. Limitations of the Study

Initially, the research goal was different: the US and the Russian market were to be analysed and compared to construct a strategy for Russia how to develop the VC market. Interviews were to be conducted with start-ups to get a closer look at the VC market and understand how the business is conducted. Unfortunately, due to Covid19 the plans could not be carried out. Another idea was to compare the financial activity of the US and the Russian venture funds, however, it also became impossible. Russian venture funds do not disclose their financial statements, which made the research impossible. This led to a delay in the research and a change in the initial topic.

5.5. Avenues for future research

The conducted research is an addition to the future researches of the degree to which the US market in general has been spreading worldwide. Every year the US market offers something new and despite the differences in cultures and mentalities of people, it still manages to become successful.

Hopefully, the research will shed a light on a question whether the government actually helps the VC to develop or not. Also, the research will help the emerging Russian start-ups and entrepreneurs to get a closer look into the US start-ups and their success.

In the future, the survey could be conducted for a larger sample, because in this case, most respondents were from Moscow. It would be interesting to get the opinions of people which live further from the capital.

5.6. Final thoughts

Overall, it is hoped that this study has helped lead to a realization that not all globally recognized innovative companies are as successful as they seem and are considered to be. The study has also sought to highlight how difficult it actually is to penetrate foreign markets. The US definitely is leading a great strategy to develop the society as a whole. However, the findings presented herein and the related recommendations may seek to encourage Russian regulators, financiers and entrepreneurs to work collectively in order to invigorate the domestic VC market and to promote entrepreneurship and innovation in Russia.

References

- Aris, Ben (2019) *The Trouble With Investing Into Russia*. Available at: <https://www.themoscowtimes.com/2019/08/29/the-trouble-with-investing-into-russia-a67068> (Accessed: 23.07.2020)
- Apellis Pharmaceuticals (2018) *SEC Filings*. Available at: <https://investors.apellis.com/financial-information/sec-filings> (Accessed: 25.07.2020)
- Atkinson, T. and Duca J. V. (2017) *Equity Regulation and U.S. Venture Capital Investment*. Federal Reserve Bank of Dallas Research Department Working Paper 1707
- Aydin, R. (2019) *The history of WeWork — from its first office in a SoHo building to pushing out CEO and cofounder Adam Neumann*. Available at: <https://www.businessinsider.com/wework-ipo-we-company-history-founder-story-timeline-adam-neumann-2019-8> (Accessed: 23.07.2020)
- Bacior, M. (2020) *A brief history of venture capital*. Available at: <https://medium.com/investify-media/the-brief-history-of-venture-capital-2b96bad02b5b> (Accessed: 26.06.2020)
- Carlson, N. (2012) *Pinterest CEO: Here's How We Became The Web's Next Big Thing*. Available at: <https://www.businessinsider.com/pinterest-founding-story-2012-4> (Accessed: 10.08.2020)
- Carson, B. (2019) *Peloton CEO John Foley Faces the Skeptics Again: This Time, Buyers in Its \$8 Billion IPO*. Available at: <https://www.forbes.com/sites/bizcarson/2019/09/26/peloton-ceo-john-foley-faces-the-skeptics-again-this-time-buyers-in-its-8-billion-ipo/#3c5c24543498> (Accessed: 12.08.2020)
- Clark, K. (2018) *The 10 largest US venture rounds of 2018*. Available at: <https://techcrunch.com/2018/12/26/the-10-largest-us-venture-rounds-of-2018/> (Accessed: 02.08.2020)
- Ducker, M. (2017) *Why Government-Supported Venture Capital Is Something You Should Think (Twice) About*. Available at: <https://www.inc.com/mike-ducker/venture-capital-government.html> (Accessed: 18.07.2020)
- Golubovich, A. (2015) *Venture capital in Russia: (un)availability and (ir)relevance* | Forbes | Available at: <https://www.forbes.ru/mneniya-column/konkurenciya/306227-venchurnyi-kapital-v-rossii-nedostupnost-i-nevostrebovannost>; (Accessed: 14.07.2020)
- Graham, A. (2019) *State of the Venture Capital Industry in 2019*. Toptal
- Guler, I. And Guillen. F. (2010) *Institutions and the internationalization of US venture capital firms*. Journal of International Business Studies 41, 285-205; Academy of International Business

- EduPristine (2017) *Venture capital*. Available at: <https://www.edupristine.com/blog/venture-capital> (Accessed: 03.07.2020)
- Eklund, Johan; Levratto, Nadine & Ramello, Giovanni B. (2018) *Entrepreneurship and failure: two sides of the same coin?* | Small Business Economics; Available at: <https://link.springer.com/article/10.1007/s11187-018-0039-z> (Accessed: 22.07.2020)
- EY Dsight (2019) *Venture Russia: results of 2019*. Available at: https://www.ey.com/ru_ru/news/2020/02/dsight-vc (Accessed: 15.07.2020)
- Fama, E.F. and Jensen, M.C. (1983) *Separation of ownership and control*. Journal of Law and Economics, 26(2), pp.301-325. (Accessed: 22.07.2020)
- Fedotov, I. (2019) *Venture investment*. Available at: <https://vc.ru/finance/105945-venchurnye-investicii-chto-eto-takoe-kak-oni-rabotayut-i-kakie-est-plyusy-i-minusy> (Accessed: 20.06.2020)
- Gompers, P. A., Gornall, W., Kaplan, S. and Strebulaev, I. (2016) *How Do Venture Capitalists Make Decisions?*. NBER Working Paper Series, No. 22587 (Accessed: 27.06.2020)
- Griffith, E. (2019) *Peloton Is a Phenomenon. Can It Last?* Available at: <https://www.nytimes.com/2019/08/28/technology/peloton-ipo.html> (Accessed: 13.08.2020)
- Hartmans, A. and Leskin, P. (2019) *The history of how Uber went from the most feared startup in the world to its massive IPO*. Available at: <https://www.businessinsider.com/ubers-history> (Accessed: 12.08.2020)
- Jensen, M.C. and Meckling, W.H. (1976) *Theory of the firm: managerial behaviour, agency costs and ownership structure*. Journal of Financial Economics, 3(4), pp.305-360.
- Johnson, W. C. and Sohl, J. (2012) *Angels and venture capitalists in the initial public offering market*; Venture Capital, Vol. 14, No. 1, 27-42.
- Jiang, W. (2017) Differences Between an Angel Investor and a Venture Capitalist. Available at: <https://www.business.com/articles/angel-investors-vs-venture-capitalists/> (Accessed: 24.06.2020)
- Konrad, A. (2019) *Zoom, Zoom, Zoom! The Exclusive Inside Story Of The New Billionaire Behind Tech's Hottest IPO*. Available at: <https://www.forbes.com/sites/alexkonrad/2019/04/19/zoom-zoom-zoom-the-exclusive-inside-story-of-the-new-billionaire-behind-techs-hottest-ipo/#50a3a3c84af1> (Accessed: 17.08.2020)

- Kunthara, S. (2019) *WeWork May Reduce Its Valuation Ahead Of IPO By Tens Of Billions*. Available at: <https://news.crunchbase.com/news/wework-may-reduce-its-valuation-ahead-of-ipo-by-tens-of-billions/> (Accessed: 02.08.2020)
- Lanin, R. (2009) *The peculiarities of the economic relations on the venture capital market*. ISSN 1810-0201. Vestnik TGU, issue 10 (78)
- Liu, H. and Wang, Y. (2018) *The Value of Crowdfunding: An Explanation Based on Demand Uncertainty and Comparison with Venture Capital*. *Emerging Markets Finance & Trade*, 54:783–791, Taylor & Francis Group, LLC, ISSN: 1540-496X print/1558-0938 online, DOI: <https://doi.org/10.1080/1540496X.2018.1434619>
- Moran, D. (2019) *A Brief History of WeWork, the Flying Startup Facing Turbulence*. Available at: <https://www.bloomberg.com/news/articles/2019-09-22/a-brief-history-of-wework-the-flying-startup-facing-turbulence> (Accessed: 15.08.2020)
- Olsen, D. (2018) *The 20 most valuable VC-backed companies in the US*. Available at: <https://pitchbook.com/news/articles/the-20-most-valuable-vc-backed-companies-in-the-us> (Accessed: 04.08.2020)
- Olsen, D. (2018) *Startup nation: The most valuable VC-backed company in each US state*. Available at: <https://pitchbook.com/news/articles/startup-nation-the-most-valuable-vc-backed-company-in-each-us-state-interactive-graphic> (Accessed: 04.08.2020)
- Peloton (2018) *SEC Filings*. Available at: <https://investor.onepeloton.com/financial-information/sec-filings/> (Accessed: 23.07.2020)
- Pyko, O. (2012) *The formation of the venture capital market in Russia*. No 42(824)
- Ross, S. (2020) *How is Venture Capital Regulated by the Government?* Available at: <https://www.investopedia.com/ask/answers/013015/how-venture-capital-regulated-government.asp> (Accessed: 24.07.2020)
- Rudden, J. (2020) *Value of venture capital investment in the U.S. 2020*. Available at: <https://www.statista.com/statistics/277506/venture-capital-investment-in-the-united-states-by-sector/> (Accessed: 01.08.2020)
- Schreiber, B. A. (2017) *Tesla, Inc.* Available at: <https://www.britannica.com/topic/Tesla-Motors> (Accessed: 15.08.2020)
- SEC (2018) *Annual reports*. Available at: <https://www.sec.gov/Archives/edgar/data/1533523/000119312519220499/d781982ds1.htm> (Accessed: 15.08.2020)
- SendGrid (2016) *Annual reports*. Available at: <https://sendgrid.com/blog/sendgrids-startup-story-with-co-founder-isaac-saldana/> (Accessed: 20.07.2020)

- Shang, Y., Yu, H. and Ma, Z. (2020) *Venture Investors' Monitoring and Product Innovation Performance in Serial Crowdfunding Projects: An Empirical Test*. The Chinese Economy 2020, VOL. 53, NO. 3, 300–314 <https://doi.org/10.1080/10971475.2020.1721045>
- Solovyov, A. (2019) *How does a venture fund work?* Available at: <https://vc.ru/finance/67606-kak-ustroen-venchurnyy-fond-s-kommentariyami> (Accessed: 27.06.2020)
- Strebaluev, I. and Gornall, W. (2015) *How Much Does Venture Capital Drive the U.S. Economy?* Available at: <https://www.gsb.stanford.edu/insights/how-much-does-venture-capital-drive-us-economy> (Accessed: 23.07.2020)
- Szmigiera, M. (2019) *Venture capital in North America - Statistics & Facts*. Available at: <https://www.statista.com/topics/2565/venture-capital-in-north-america/> (Accessed: 23.07.2020)
- Tarhuni, N., Gelfer, J., Frederick, A., Stanfill, C., Stanford, K. and Le, V. (2019) *The definitive review of the US venture capital ecosystem*. PitchBook; Research and analysis
- Tesla Motors (2016) *Annual reports*. Available at: <https://www.tesla.com/about> (Accessed: 20.07.2020)
- Urakchiev, A. (2014) *The russian venture capital market: the history of development, current tendencies*. Business strategies
- Vranovich, E and Michurina, O (2013) *Venture capital in the innovational development of the economy*. ISSN 1993-047X. “Current problems of the economy and law”; №4.
- Walker, S. (2010) *Wave Theory For Alternative Investments: Riding The Wave with Hedge Funds, Commodities, and Venture Capital*. McGraw-Hill Education; 1st Edition, 464 pages, ISBN-13: 978-0071742863, ISBN-10: 0071742867
- White, A. and Mathur, P. (2019) *The 25 most valuable VC-backed companies in the US*. Available at: <https://pitchbook.com/news/articles/the-25-most-valuable-vc-backed-companies-in-the-us> (Accessed: 04.08.2020)

Appendix A: Survey

Question 1

How many companies from the list below are you aware of?

The respondents were to choose the level of their awareness for each on the company like so:

	Very Aware	Somewhat Aware	I have heard of them	Not aware
WeWork	+			
Uber	+			
Peloton	+			
Pinterest	+			
Tesla Motors	+			
SendGrid	+			
Apellis Pharmaceutical	+			
Lyft	+			

Question 2

How aware of the the origin of the companies from the list below are you?

The respondents were to choose the level of their awareness for each on the company like so:

	Very Aware	Somewhat Aware	I have heard of them	Not aware
WeWork	+			
Uber	+			
Peloton	+			
Pinterest	+			
Tesla Motors	+			

SendGrid	+			
Apellis Pharmaceutical	+			
Lyft	+			

Question 3

Please select any companies you know of that began their activity as start-ups. The respondents were to choose any companies from the list below:

WeWork

Uber

Peloton

Pinterest

Tesla Motors

SendGrid

Apellis Pharmaceuticals

Lyft

Question 4

How familiar are you with the products or services of the companies from the list below are you
The respondents were to choose the level of their awareness for each on the company like so:

	Very Aware	Somewhat Aware	I have heard of them	Not aware
WeWork	+			
Uber	+			
Peloton	+			
Pinterest	+			
Tesla Motors	+			
SendGrid	+			
Apellis Pharmaceutical	+			

Lyft	+			
------	---	--	--	--

Question 5

Which companies product or service have you used?

The respondents were to choose any companies from the list below:

WeWork

Uber

Peloton

Pinterest

Tesla Motors

SendGrid

Apellis Pharmaceuticals

Lyft

Question 6

Which of the companies in your opinion are the most successful?

The respondents were to choose any companies from the list below:

WeWork

Uber

Peloton

Pinterest

Tesla Motors

SendGrid

Apellis Pharmaceuticals

Lyft

Question 7

Which of the following companies would you consider financially profitable?

The respondents were to choose any companies from the list below:

WeWork

Uber

Peloton

Pinterest

Tesla Motors

SendGrid

Apellis Pharmaceuticals

Lyft

Question 8

Select from the list the companies you consider to be recognised in the Russian Federation?

The respondents were to choose any companies from the list below:

WeWork

Uber

Peloton

Pinterest

Tesla Motors

SendGrid

Apellis Pharmaceuticals

Lyft

Question 9

If you were to invest in a start up, would you prefer if its financial reports were publicly available before investing?

The respondents were to answer yes/no/I do not know.

Question 10

Would you say that start-ups are the source of innovation in the world?

The respondents were to strongly agree/agree/neutral/disagree/strongly disagree.